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A Comparison of Two Approaches to One-Exposure Inservice Workshops Based on Values-Clarifying Questions

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A COMPARISON OF TWO APPROACHES TO ONE-EXPOSURE
INSERVICE WORKSHOPS BASED ON
VALUES-CLARIFYING
QUESTIONS

by
Marianne Kulak King

A Dissertation Submitted to the Faculty of the Graduate
School of Loyola University of Chicago in Partial
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VITA

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TO MY PARENTS

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CHAPTER I

INTRODUCTION

Nuclear American society is being bombarded by the changes its technological advancements have brought about. These changes have affected every phase of modern man's life, placing him in the position of constantly having to adjust to an ever-changing environment.

The fact that we are entering the last quarter of the twentieth century deluged with ever increasing scientific achievements has also placed a tremendous burden on our society's educators. Coupled with these advances in technology is the knowledge explosion. Never before has there existed such a wealth of data to be learned, nor has the state of knowledge been so dynamic.

Educators are beginning to realize that they cannot teach all that there is to teach, nor can man learn all that there is to learn. Our schools have been presented with their greatest challenge: how to educate today's youth for tomorrow's demands, while helping them function today.

Recent developments in our knowledge of educational psychology, learning theory and human growth and development suggest ways for our schools to begin to meet this challenge. One of these ways is by helping young people develop their own values systems. In the past, it was assumed that certain

values were universal and the function of the school was to inculcate these values in young people. It is now realized that individuals cannot be made to accept ready-made values. This new approach to values education calls for educators to change. They must not only be made aware of this new development, but they must also learn new skills, new behaviors and new attitudes in order to implement this development in their classrooms.

Each new development in the field of education then, also creates a problem; the problem of having to provide appropriate and effective teacher training for those educators already inservice.

Statement of the Problem

To anyone familiar with American education, it is quite evident that our most urgent educational problem is not the education of the un-educated--the education of school children or the functionally illiterate or the disadvantaged or the so called ineducable. It is the education of educators (Reno, 1968, p. 8).

Inservice education has long been considered an acceptable vehicle for introducing new techniques--such as how to ask values-clarifying questions--to teachers. It is generally recognized, however, that inservice training programs have not been successful in promulgating change in teacher behavior.

Traditionally, administrators are given the responsibility for planning their districts' inservice program. Many administrators, however, cannot provide this leadership,

either because of job pressures, or their own inadequacies for the role. There also exists a tendency to assume that all teachers are the same, and as a result, the personal characteristics and individual needs and differences of the teachers are not accounted for by those planning the inservice program. Consultants, who are brought in to make the inservice presentations, often fail to help teachers bridge the gap between the abstract presentation and the actual concrete classroom implementation of the presentation. The resultant inservice programs are then generally limited to a series of totally uncoordinated workshops, which are planned by the administration, and conducted by outside consultants with very little prior planning or subsequent follow-through.

While a number of inservice designs have been developed (institutes, seminars, courses), most school districts have been limited by factors such as cost of teacher release time, consultant fees, and administrative, as well as teacher planning time, to utilizing a one-exposure workshop format. Taking these time and money factors into account, the problem then lies in identifying an effective approach to introducing a new technique to teachers, within the framework of a one-exposure inservice workshop, which would result in teacher change.

Purpose of the Study

The purpose of this study was to compare two approaches to one-exposure workshops, Approach A and Approach B, to

determine which was more effective in promulgating change in teachers' questioning behavior, so as to increase or establish their use of values-clarifying questions--personal questions which ask about the learners' own ideas, feelings, or intentions. Workshop Approach A was characterized by:

- a. Judgment of teacher needs determined by the administration.
- b. Use of outside consultants to ameliorate the perceived problem.
- c. Content of the various presentations by consultants treated as discrete and unrelated to each other or to the ongoing curricular content and instructional materials being used by the teachers.
- d. Consultants not interacting with each other but remaining involved in their own areas of expertise.

Workshop Approach B was characterized by:

- a. Judgment of teacher needs determined by the administration in conjunction with the teachers and consultants.
- b. Outside consultants attempt to ameliorate the agreed upon problems within the established limitations after reviewing the curricula of the district.
- c. The contents of the workshop presentations inter-related and unified with each other and also with the actual classroom materials being used by the

teachers.

- d. Consultants combining their presentations to make clear the interrelationships of their individual disciplines.

In addition, Workshop C was a no-treatment control group.

Data was also collected on significant personal teacher characteristics (selected personality factors, age, teaching experience, social origin) to determine their effect on the incorporation of values-clarifying questions into the teacher's classroom repertoire, independent of the workshop approach used.

A simultaneous companion study, focusing on higher level cognitive questions was coordinated with this study in Approach B, to determine if the inclusion of higher level cognitive questions would affect the use of values-clarifying questions.

The questions which this study sought to answer were:

1. Would the teachers exposed to workshop Approach B exhibit greater change in their values-clarifying questioning behavior?
2. To what extent was change related to the selected personality factors of the teachers?
3. To what extent was change related to the age of the teachers?
4. To what extent was change related to years of teaching experience of the teachers?

5. To what extent was change related to the social origin of the teachers?
6. To what extent was change in the values-clarifying questioning behavior of the teachers related to change in their cognitive questioning behavior?

Significance of the Study

...inservice teacher training is the slum of American education--disadvantaged; poverty stricken; neglected; psychologically isolated; riddled with exploitation, broken promises and conflict (Davis, 1967, p. 1).

Research shows that inservice education has been approached by those engaged in its planning, in a potpourri of trial and error ways, with little thought given to objectivity and evaluation. As a result, there is a scarcity of empirical data available, bearing directly upon methodological models, theories and techniques appropriate to developing effective inservice programs.

The dynamic state of knowledge, however, necessitates the existence of inservice programs because preservice education cannot predict and meet all the future needs of teachers. Inservice education programs are vital because they provide teachers with the means for updating their knowledge, acquaint them with innovations and enable them to learn new techniques. There exists then a need for the identification of effective approaches to inservice education programs.

This study hopes to make a significant contribution

to educational theory and practice by gathering empirical data which can be used in developing a model for the training of teachers through inservice workshops that are effective within the existing parameters of time, costs, and available personnel. This study was also significant to the extent that:

1. It defined an approach for introducing teachers to a relatively new area of instruction, the use of values-clarifying questions.
2. It made specific suggestions on how to utilize values-clarifying questions in the classroom.

Assumptions

The following assumptions have been formulated after a review of the literature; these served to delimit the hypotheses for this study. It was assumed that:

1. Inservice education programs were in need of new and effective modes of training teachers.
2. One-exposure workshops could result in effecting change in a teacher's values-clarifying questioning behavior.
3. Teachers were capable of changing their behavior as a result of inservice training.
4. Personal characteristics of teachers affected their classroom behavior.
5. Personal characteristics of teachers affected their acceptance or rejection of new techniques.

6. Teachers used questions in the act of teaching.
7. The ability to ask values-clarifying questions was a technical skill which could be developed through training and practice.
8. Most teachers did not ask values-clarifying questions in the act of teaching.

Stated Hypotheses

This study was designed to test the following null hypotheses:

1. There is no significant difference between type of workshop approach and the number of values-clarifying questions asked by the subjects.
2. There is no significant relationship between the frequency of values-clarifying questions asked and the selected personality factors of the subjects.
3. There is no significant relationship between the frequency of values-clarifying questions asked and the age of the subjects.
4. There is no significant relationship between the frequency of values-clarifying questions asked and the years of teaching experience of the subjects.
5. There is no significant relationship between the frequency of values-clarifying questions asked

and the social origin of the subjects.

6. There is no significant relationship between change in the frequency of values-clarifying questions asked and the frequency of higher level cognitive questions asked by the subjects.

Delimitations of the Study

This study was limited to a one-exposure workshop inservice design based on how to use values-clarifying questions, as defined by Rath (1966), in the classroom.

The selection of the sample of teachers further limited this study to those teachers employed in a lower middle-class suburban elementary school district.

This study did not attempt to:

1. assess the consultants' behavior.
2. assess the overall effectiveness of the teachers participating in the workshop.
3. assess the effectiveness and/or quality of the values-clarifying questions asked by the teachers in their classrooms.
4. analyze variables other than those specified in the hypotheses.

Definition of Terms

1. A One-Exposure workshop is a workshop in which the subjects and consultants meet only one time.
2. Workshop Approach A is operationally defined through

the meeting of the following criteria:

- a. Outside consultant is contacted by the administrator and asked to do an inservice workshop.
- b. Administrator names the workshop's topic and informs the consultant about group size and workshop location.
- c. After accepting the job, the consultant, independent of the administrator, decides on how to present the topic to the workshop participants.
- d. Consultant appears with the materials prepared at the specified time, presents them to the participants using whatever methodology decided upon, and leaves.
- e. Other consultants contracted for the same inservice time do the same (#a-d).
- f. The consultants work independently of each other and do not build upon each other's presentations.
- g. Consultant presentations are focused on theory rather than concrete application.

3. Workshop Approach B is operationally defined through the meeting of the following criteria:

- a. Outside consultant is contacted by the administrator and asked to do an inservice workshop.
- b. Administrator suggests the workshop's topic and informs the consultant about group size and workshop location.

- c. After accepting the assignment, the consultant sets up a meeting with the administrator and representative teachers from the group to be involved to determine the needs of the district in terms of the topic.
- d. The consultant familiarizes himself with the district's curriculum, teaching methodologies, goals, organizational structure, etc., in order to determine the content, method, and materials to be used during the workshop.
- e. Combining the identified needs of the teachers with the ongoing educational program, the consultant then decides on how to present the workshop's topic.
- f. The consultant discusses his decisions with the administrator and the representative teachers, and modifications, if necessary, are made.
- g. Other consultants contracted for the same inservice time do the same (#a-f).
- h. All participating consultants meet to coordinate and interrelate their workshop presentations.
- i. On the day of the workshop, the consultants present their topics and interrelate their materials with the other consultants' presentations.
- j. Each consultant directly relates his presentation to the materials and methods currently being used

by the workshop participants to help the participants translate theory into practice in their classrooms.

4. Workshop Approach C is operationally defined through the meeting of the following criteria:
 - a. No-treatment control group.
 - b. These subjects will be excluded from either workshop experience described above.
 - c. The subjects will be brought together for an unrelated inservice activity.
5. Values-clarifying questions are operationally defined through the meeting of the following criteria:
 - a. Must be a personal question which asks about the learners' own ideas, actions, feelings, or intentions.
 - b. Must contain the word you, in reference to the learner (i.e., what do you think, feel?).
 - c. Questions that only the learner knows the answer for.
 - d. Must be a question for which there is no right or wrong answer. Each learner may have a different response.
6. The cognitive level of questions asked are defined by Barrett Taxonomy (Clymer, 1968) as follows:
 - a. Literal comprehension: ideas and information are explicitly stated.
 - b. Reorganization: requires the learner to analyze,

synthesize and/or reorganize ideas or information explicitly stated.

- c. Inferential comprehension: learner's answer is not explicitly stated in a selection but rather inferred from his personal experience.
 - d. Evaluation: requires the learner to make an evaluative judgment utilizing external/internal criteria.
 - e. Appreciation: calls for the learner to be emotionally and aesthetically sensitive to the learning experience.
- 7. Lower-middle class suburban community is defined as one composed mainly of semi-skilled and blue-collar workers.
 - 8. Personality factors are operationally defined by the subjects' score on the Myers-Briggs Type Indicator (1962) and Heslin-Blake Involvement Inventory (Jones & Pfeiffer, 1973).
 - 9. Age is defined in terms of the chronological age in years of the subjects.
 - 10. Years of Teaching Experience is defined as the total number of full years of contractual teaching, regardless of interruptions or leaves of absence.
 - 11. Social Origin is defined in terms of the economic status, occupational role of parents, and the location of the participants' childhood homes.

CHAPTER II

REVIEW OF RELATED LITERATURE

The review of the literature relevant to this study is divided into four major areas.

1. Inservice education
2. Teacher characteristics
3. Affective questioning (values)
4. Relation of cognition and affect
in classroom learning.

The following resources were consulted in searching out current literature in addition to computerized searches of ERIC, CIJE, and DATRIX:

1. Research in Education
2. Current Index to Journals in Education
3. Dissertation Abstracts
4. Education Index
5. Encyclopedia of Educational Research
6. Professional books, journals, and
papers related to the topic.

Inservice Education

"Historically inservice education was invented to correct serious deficiencies in pre-service education (Asher, 1967 p. 1)." As pre-service training developed into professional college preparation, the focus shifted

and the need for viable inservice programs now exists as the result of incomplete preservice training (Austin, 1968). Austin's conclusions, based on a summary of the Harvard-Carnegie and Conant reports were further developed in a series of reports by Joyce (1968). These indicate that even student teaching, which has been regarded as the most effective aspect of preservice training, may, in fact, be of little value. Although promising programs and innovations do appear in teacher education institutions, a fairly conventional program still exists--primarily as a result of state certification requirements. This basic pre-service program has been well researched and found wanting.

No such conventional program can be described however for inservice education. If any generalization is possible, it is that schools do very little inservice training, and what they do is poor. Most school districts budget little or no money for such training and limit themselves to a program consisting of faculty meetings and one-day teacher institutes...

Local workshops are also part of many inservice programs. These often focus on specific new curricular materials such as a new science or math program, and are useful in updating the teachers' knowledge, but they rarely provide any effective training in the new methods needed to use the curriculum to its best advantage. In fact, perhaps the most remarkable thing about inservice education as a whole is that so little of it focuses on these teaching methods. Actually the reverse should be true. The inservice setting is particularly well suited to instruction in classroom skills, since the teacher has ample opportunity to practice new skills in his own classroom. Furthermore, most inservice teachers, specifically those just starting their careers, intensely want to develop better teaching skills (Borg, 1970, p. 23).

Rubin (1969) concluded that the first two years of a teacher's experience are the most crucial. It is during this period that attitudes and beliefs are shaped and the basic characteristics of a teaching style are established. Rubin feels his research also provides evidence that "teachers cannot learn to teach until they begin to work with children who are learning...(p. 4)."

Concurrent with the shift from a "deficit repair" approach to inservice programming to a "growth" approach for further training and refinement of skills, complicating factors developed--specifically, the knowledge explosion. Increases in knowledge of the psychology of education, increases in the bodies of knowledge in the various content areas, the development of instructional hardware, and the changes in the make-up of the student bodies as a whole created almost instant obsolescence of educational training.

Harris and Bessent (1969) reviewed the literature relating to inservice education for the past thirty years and summarized the need for inservice education as resulting from rarely ideal preservice programs, obsolescence of practices and methods, changes necessitated in articulation and coordination as curricula change, and the increase in staff morale that such programs can foster.

The change in the focus of inservice activities has led to a proliferation of programs with great diversity of purpose which vary according to the answers to such questions

as:

1. Who is to be trained? Why?
2. What is to be taught? Why?
3. Is the training for specialized units?
4. Is it retraining or additional training?

According to Westby-Gibson (1967) the prime purpose of inservice training is to change educational practices and most importantly to upgrade and improve classroom instruction. However, Harris and Bessent (1969) feel that the prime goal is to change people. Wallen (1969, p. 45) states: "The need for inservice teacher training is brought about when changes introduced in curriculum and instruction are so far-reaching that the teachers cannot cope with them without retraining." Other purposes for inservice education stated in multitudinous reports are:

1. Changing to a new content area or grade level
2. Returning after a prolonged absence
3. Learning specific competencies
4. Increasing command of content area knowledge
5. Training to adjust to new organizational structures such as team teaching, open space buildings, non-graded classes, etc.
6. Maintenance of certification
7. Moving ahead on the local salary schedule.

Ideally, the determination of the purposes for inservice programming should indicate the evaluation procedures to be used in judging the program's effectiveness, as well as the format and content of the program itself. However, this does not appear to be the case. The literature supports the probability that there are as many approaches as there are individuals involved in preparing and offering such programs. The approaches cover the gamut from formal lectures and courses, observations, "share the ignorance" buzz groups, guided practice with video feedback, to sensitivity groups and transcendental meditation. The lack of confluence between purposes, methods, and evaluations of effectiveness is further confused by two or more methods being used concurrently. Bhaerman's (1970) contention that inservice programs are not based on a total educational philosophy is well supported in the literature. The questions of "What to present?" and "Why?" are not usually answered in the program description, nor are questions dealing with "To whom?" and "How?". The question of "When?" is not dealt with either.

Scheduling usually turns out to be an important factor in the success of the program. Too often the nature of the program is dictated by the time available. Otherwise well planned inservice programs are slap-dashed into the day or two before school starts when most teachers would prefer to be getting their room ready and their thoughts ready for the arrival of the children. Or they are tacked onto busy school days when the thoughts of even the most conscientious teachers are on other things--rest and rehabilitation being very prominent among them. If inservice programs are

worth careful planning, they are also worth the time required for implementation...

If only limited time can be made available, then the activities must be limited to fit the time...

Some school systems provide a number of inservice days throughout the school year. The children are dismissed and the day is available for whatever work needs to be done. The idea is sound and the plan workable so long as the days do not become catchalls for administrative tasks or deteriorate to grab bag sessions where a variety of speakers are brought in to amuse, delight, and inspire the assembled throng (Otto & Erickson, 1973, p. 14).

It is not surprising that Hermanowicz found general dissatisfaction with existing programs. "Rigorous studies are rarely reported, forcing practitioners to speculate concerning the mistakes others have made (1966, p. 4)." The failings are attributable to inappropriate purposes, inappropriate activities selected without regard to the purposes to be achieved, and lack of skill among those who design and conduct instruction improvement. The lack of findings suitable for guiding future researchers develops from the fact that

...inservice education as an instrument for organizational change becomes a non-repetitive process similar to research and development activities... Research in the field is meager. Reports of practices are sketchy and tend to be reported as local success stories rather than as objective description (Harris & Bessent, 1969, pp. 20-21).

Amidon (1967, p. 256) suggests two questions that ought to be asked of any inservice program, regardless of its origins, orientation, or emphases. First, will teachers be acting differently in the classrooms as a direct result

of the training? Secondly, if there are changes, has the quality of instruction improved or is it just different?

A powerful tool for effecting change via inservice programming could be the vague, difficult to define, complex phenomena labeled "evaluation". However, aside from establishing mastery of behaviorally stated minimum goals, the tools available are crude, and as a result, the reported findings are subject to interpretation and reinterpretation by other researchers as they follow their own predilections.

Clearly formulated statements of pre-existing school programs should precede any planning for change through inservice training. These statements would enable evaluations to be made in terms of, "Change from what?". The need to make assumptions that the schools, staffs, and curricula are similar to those in the reported past studies could also be eliminated by such precise descriptive statements of the pre-existing program of the district for which the inservice training is being planned. For such statements, program designers could also determine:

1. What change is needed and why?
2. Who and what shall be changed and why?
3. When will the change take place and why?
4. How will the change take place and why?
5. How will the change be initiated, accomplished, maintained, and assessed?

In the past, evaluation of inservice training has often

been misdirected because underlying assumptions were not clarified. Moburg (1972) discussed past decisions regarding evaluation and he clearly delineates a crucial area of confusion. Who is to be measured? Is direct measurement of teacher growth appropriate for evaluating inservice activities, or should pupil growth be measured, or both? Since there is a consensus that the aim of inservice training is to provide for measurable improvement of instruction, success or failure must ultimately be measured in terms of pupil growth. Yet, Moburg cites longitudinal studies where teacher growth was both obvious and measurable, but not pupil growth. A year or more later, pupil growth was also measurable. Is evaluation of inservice programming then to be done only after an appropriate time lag that enables the changes in teacher behavior to be manifested in pupil growth? This appears to be a clumsy, time consuming, and expensive solution.

Bush (1971) agrees with Rubin's (1971) statement that judgment of quality in inservice education is ultimately in the students' learning. But, he adds, "...alteration of teacher behavior can be considered a legitimate objective in and of itself (p. 65)." Herrich (1957) proposed that changes "...be determined by the difference that exists between the starting point...and the last observation.... This suggests evaluation based on judgments of relative rather than absolute value...(pp. 312-313)."

Decisions as to what training shall be given and who shall give it open additional areas of inquiry regarding inservice education. While most researchers agree that the future participants should be involved in these decisions, they admit that this active involvement in the planning is given only token consideration for reasons of time, cost, scheduling, and expertise. Classroom teachers are usually so caught up in the day-to-day activities that they cannot see their own needs objectively. Consequently, the decisions are most often made at the administrative level. Teachers make excellent trainers of teachers but contractual considerations make allotment of preparation and presentation time unlikely (Rubin, 1969). Buskin (1970, p. 23) noted that "university personnel were poorly prepared to serve as trainers, and administrators seldom have the time necessary, or the personal relationships with their staff to do the job effectively." Morison (1966) introduced the concept of a "change agent" as a new educational role when he advocated the use of an outside force as a catalyst for change. Although the role is not precisely defined, there is recognition of the fact that special talents and knowledge are required. According to Lavisky (1969, p. 6), "the typical public school teacher or administrator possesses neither the research skills nor habits of scholarship necessary for effective planning, implementation, and evaluation of inservice programs." He concludes that trained, knowledgeable

outside consultants are in all likelihood the persons best suited to do inservice training.

Perloff's (1970) study of NDEA Summer Institutes supported earlier research relating to time and scheduling factors. Although the programs were of long duration while teachers were "on vacation"--a supposedly ideal situation--she reported "...it is probably unrealistic, and perhaps even unfair, to expect programs of the length, scope, and nature of summer institutes to make sweeping, radical, and immediate changes in the participants' knowledge, attitudes, and teaching practices (p. 46)." The report recommends that all inservice programs:

1. Be planned in terms of the participants' needs
2. Be relevant to a major and significant part of what the participants teach. Topics too remote from the on-going school curricula are a waste of time, money, and effort
3. Be practical in orientation--readily usable when the participants return to their classrooms.

Rubin (1969), Amidon (1967), and Mackie and Christensen (1967) corroborate the basic finding of Perloff--that of practicality. In reports, the application phase of learnings seemed to incur the most difficulty. Mackie and Christensen claim that the "research to application process"

has never been properly developed. Although "...teachers are more effective when they have alternative strategies with which to teach a given lesson, each of these strategies must be acquired systematically and each must be perfected through cumulative practice (Rubin, 1969, p. 13)."

The components of successful inservice training--that which is reflected in classroom behavior--has been summarized by Lavisky (1969, pp. 10-11):

1. Timeliness--fills an ongoing instructional gap
2. Interest--from staff and administration
3. "Engineering"--product or process is easily adopted
4. Concreteness--material items (lesson plans, texts, A-V aids) are provided
5. Zeitgeist--timing, materials, personalities, etc. "jell" during the training period
6. Personal interest--a person with influence and credibility serves as a forceful proponent of the presented content.

Gross (1968) analyzed the effectiveness of inservice activities from the opposite view--that is, why programs are so often ineffectual in promulgating the anticipated changes. He noted five specific contributing factors:

1. Staff resistance
2. Lack of clarity of the innovation
3. Group or individual inability to perform the

innovation

4. Lack of existence of necessary materials and resources
5. Lack of compatibility between organizational conditions and the innovation.

The extensive literature relating to inservice education reveals no previous study similar to the current one. However, trends can be noted from the following summary statement of reported studies which deal with the various aspects of this study.

Reese (1966) compared the results of training one hundred seventy-five teachers by different methodologies: lectures, study groups, and consultants. Effectiveness of the training was analyzed by responses to a questionnaire, reports from project directors, and detailed observer reports. No empirical data was generated, consequently no statistical analyses were possible. It was generalized that the participants thought highly of the program, but without a data base even this conclusion may be erroneous.

Leary and Wolf's (1972) examination of short term programs was designed to determine the extent to which such programs are recognized as sources of information about educational innovations and contribute to the adoption of innovations. Factors identified for analysis were program attendance, source of support, subject matter, and participants' judgments of the program's worth. Overall conclusions

were that programs generated more awareness of innovation and more adoption of innovations than was anticipated. Faulty experimental design precludes attribution of the changes directly to the nature of the program.

Carline (1970) focused on the feasibility of training-out undesirable verbal behaviors of teachers and/or the training-in of preferred ones through inservice activities. For analysis, the teachers were matched demographically; students were matched by intelligence; and schools were matched by statements from local administrators. The analyses showed that of the seven verbal behaviors to be trained-out, none were accepted. Five of the seven to be trained-in were accepted. The data allow the conclusion that inservice programs can modify teacher behaviors in one direction only--the addition of behaviors to the teaching repertoire. Carline's study failed to show any pupil change related to the teacher change, most likely reflecting Moburg's statements regarding delayed student growth.

Several studies have been reported which were designed to measure some aspect of change in classroom questioning strategies as resulting from inservice training. None, however, compared alternative methods of presenting the same content within the constraints of a one-exposure workshop, nor have any previous researchers examined the interrelation of affective and cognitive questioning behaviors in classrooms.

Allen (1967) developed an inservice format for the development of what he termed "technical teaching skills". Question asking was considered to be one such generic skill. Although specific findings for change in questioning habits was not reported, there is generalized support for a need for change in classroom questioning and for the use of inservice activities as a vehicle whereby teachers can acquire the needed skills.

Ward (1970) also examined development of improved question asking skills through inservice programs. Using microteaching episodes for analysis, he focused on the mode of feedback given to the participants--videotapes, audiotapes, a combination of both, and self-reflection--for self analysis of acquired learnings. The study involved seventy-eight teachers, randomly assigned to treatment groups for two-day training programs in question asking. Using a pre-test post-test design he concluded that change in questioning could be instituted through inservice programs, and that audiotaping alone was the most effective feedback tool. This finding cannot be accepted without question since no discussion of the participants' previous experiences with videotape was included. Borg (1970) had noted that self analysis of the first videotapes was affected by a "cosmetic affect" that caused the participant to focus on appearance, voice, and other extraneous factors when viewing the earliest tapes.

Adair and Kyle (1969) focused on the training-out of use of rhetorical questions and the training-in of increased use of probing questions. Using videotape feedback with a sample of sixth grade teachers, they concluded that the methodology did indeed reduce the number of rhetorical questions significantly, and increased, not significantly, the number of probing questions. The use of videotape as a feedback tool was not compared to other techniques. The relation of this report to Ward (1970) and Carline (1970) is obvious in that these later studies re-examined two of the factors involved in researching the effectiveness of inservice training--the problem of train-in vs. train-out, and the feedback method. The present study has examined yet another factor, the approaches employed in one-exposure inservice presentations.

During the development of mini-course programs, Borg (1970) researched inservice programming and classroom questioning habits extensively. The main field test for the elementary program involved forty-eight teachers with an average of nine years of experience. Trained students were used to make pre and post evaluations of videotapes of the participants. The four treatment sessions resulted in significant change in ten out of the twelve categories. Re-analyses were done by grade level, sex, and socioeconomic status of the pupils to determine if adoption of the skills was related to the kinds of children being

taught. The results indicate that neither sex nor grade level were significant factors. However, teachers employed in working class districts showed greater growth in most categories. A companion study at the secondary level showed generally less change.

In terms of the variables accounted for, Bruce's (1969) dissertation most closely resembles this study. The variables of age, personality, and experience, as well as science knowledge, were incorporated into the experimental design for measuring the effects of a three-week summer inservice institute. Trained raters, using a question taxonomy developed by Harris and Bessent (1969), evaluated the pre and post measures. No relation between personality or age and change in questioning was found and a negative correlation between teaching experience and positive change in questioning habits noted, and a positive correlation between science knowledge and improved questioning habits were noted.

Various components of the present study have been researched, in an effort to make inservice education viable but the question, "What approach will be most effective within the parameters that exist for most school districts?" has been unexamined. There is a large gap between theory and practice in most areas of the day-to-day school world and in the case of inservice education, both elements are weak. Past research indicates that effective inservice involves such diverse factors as philosophy, people,

planning, programs, performance, and practices--to name a few. There is "...a diversity of well discussed views about the specific goals of education but precious little agreement about the goals of inservice education. In addition, there is even less empirical evidence as to its effects (Benjamin, 1968, p. 550)."

The literature review led to the identification of a feasible approach to Workshop B--the experimental approach. The recommendations which were incorporated into the design are summarized as follows:

1. Outside consultants are the persons best suited to do inservice training (Morison, 1966; Lavinsky, 1969).
2. Inservice programs should be planned (a) in terms of the participants' needs, (b) be relevant to a major and significant part of what the participants' teach, and (c) be practical (i.e., usable in the classroom) in orientation (Perloff, 1970; Rubin, 1969; Amidon, 1967; Mackie & Christensen, 1967).
3. Both teachers and administrators should be involved in the planning of inservice activities (Ploutz, 1963).
4. Inservice programs can modify teacher behavior in one direction only--the addition of behaviors to the teaching repertoire (Carline, 1970).

In addition, the recommendation of the Eastern Regional Institute for Education (ERIE) to incorporate a theory of change into the design of an inservice workshop was also followed (Ritz, 1970). The theory and model developed by Getzels (1958) entitled "Administration as a Social Process" was selected as the change model to implement the ERIE format. The Getzels' model stresses two dimensions of activity in a social system--the nomothetic and the idiographic.

The major elements which constitute the nomothetic or normative dimension of activity are those of institution, role and expectation. For example, the activities in which workshop participants engage in order to learn the necessary content and methods of a new curriculum are considered to be nomothetic activities. On the other hand, the elements of individual, personality and need disposition constitute the idiographic or personal dimension of activity in a social system. Activities designed to keep workshop participants happy, comfortable and interested in what is going on are idiographic in nature. Getzels' model assumes that for effective organization, there needs to exist a reasonable balance between task accomplishment (the members of a workshop feel instructional goals are being achieved) and a sense of personal social satisfaction (Ritz, 1970, pp. 12-13).

It was further decided that in Workshop Approach B, the participants would be given concrete applications of the workshop's topic. According to Williams,

We have found in our applied work of educational engineering that relevant research studies need to be translated into action programs for the classroom teacher. Latest research findings on learning and thinking must be implemented at the operating level, and teacher inservice training programs be offered in an operationally oriented direction, i.e., from the researcher's concern

with the what to the teacher's concern with the how (1968, p. 11).

The major difference between Workshop Approach A and Workshop Approach B is best explained in terms of the Getzels' model. The traditional emphasis in workshop planning (Approach A) has been upon the nomothetic dimension--securing consultants well-versed in the content of the workshop, providing the materials for instruction and the like. The experimental approach--Workshop Approach B--takes into account not only this nomothetic dimension, but the idiographic dimension as well.

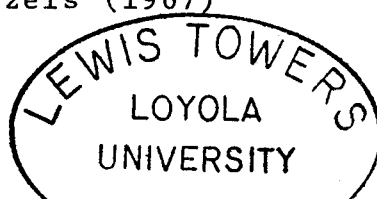
Teacher Characteristics

Evaluation of research done during the past decade relating to the characteristics of teachers that might affect their classroom behavior led Jansen to conclude that "...investigations do not develop any presage factors on the basis of which predictions can be made, but they do indicate factors that determine teaching behavior and open the possibility for intervention and control in education (1972, p. 43)."

This conclusion regarding the impact of teachers' personal characteristics on performance has always been generally accepted and is reflected in teaching assignments, committee appointments, organizational arrangements such as team teaching, extra curricular activities, and even in the self-selected social groupings of the teachers' lounge.

It seems ironic that variations of teacher characteristics have been, and will probably continue to be, ignored when planning or evaluating inservice activities. The activities are most often arranged in terms of organizational convenience--that is, by building, grade level, or subject area. Formation of groups on these bases is predicated on the faulty assumptions that all teachers in the group are equally in need of the training to be offered and will be equally able to accept, internalize; and apply the presented content. Research has shown, however, that many non-academic characteristics affect teachers' professional performance of which inservice education is a vital component.

Reported relevant literature indicates the prime factors to be considered when planning for teacher growth are personality, age, social origin, and teaching experience. A great deal of the overlapping that appeared in the reports was caused, not so much by faulty experimental design, but by working with human beings in non-laboratory environments, by a lack of uniform definitions, and by the interrelatedness of the specific factors. Teaching experience, for example, is contaminated by grade level or subject taught, as well as by total number of years of experience. Yet the factor of years of experience is usually a function of age. Similarly, as Havighurst and Neugarten (1967) point out, personality and social origin interact--first in the choice of teaching as a career and later, as Getzels (1967)



indicates, in classroom behavior.

The research, consequently, is fragmented and findings are often diametrically opposed making it impossible to draw incontestable conclusions. The trend of past research findings indicates that a relationship exists between personality, social origin, age, teaching experience and the ultimate outcomes of inservice education. Therefore, appropriate analyses of inservice programs should account for these factors in their relation to teacher change.

Ryans' (1960) classic study was an attempt to isolate the personal and social characteristics for which evidence exists of a relation to teaching behavior. Research prior to the development of the National Teacher Examination had shown such factors to be relevant to the identification of effective teachers. Technical considerations precluded their incorporation in the test itself which in its final form covers only academic learnings. Ryans was able to assemble a composite profile of an effective teacher and states that the factors tend to cluster, and further, that these clusters of characteristics in any given teacher would vary in their impact on learners, depending on the personal and social characteristics of those learners. Barr (1960) attempted to further clarify Ryans' work through the development of a scale for classifying these personal qualities of teachers. His purpose, like Ryans', was the development of an instrument that would be predictive of

teacher effectiveness and consequently of value in planning teacher improvement programs. He used a precise behavioral definition of personality and multiple definitions of the items in the instrument to avoid "...the impression that the choice of vocabulary has rested pretty much on personal preference (p. 401)." The development of such a scale is significant in that it supports earlier researchers in their contentions that personality is a factor to be considered in evaluation of teacher effectiveness or growth. The utility of this scale is unverified. Barr states "...Whether the scores have any practical value remains to be determined by further research (p. 408)." There are no reports of this having been done.

Concurrent with the Barr and Ryans projects, Washburne (1960) also examined characteristics of teachers that are reflected in their classroom effectiveness. In addition to teacher types, he classified learner types which Ryans had indicated would be an additional variable. Using many of Ryans' terms in measuring teacher effectiveness as it relates to academic achievement and personal adjustment of students, he found no relationship between teachers' scores on the Teacher Education Examination and the growth of their students. Nor did he find a relationship between observed teacher behaviors and student growth. He did find "...clear evidence that the teachers' personality has a clear and measurable effect...(p. 428)."

Getzels (1967), in his description of the personal components necessary for effective teaching, clarified the interrelation of role perceptions and personality. In dealing with the perceptions and expectations of the teaching roles, he explains, conflicts develop, and it is the individual's personality which determines whether or not these conflicts "...will give rise to productive transformations (p. 319)." The influence of personality on conflict resolution is significant in any inservice project since internal conflicts are likely to arise when new methods designed to promote changes in classroom behaviors are presented in the institutional setting.

Kleinman's (1965) investigation indicated that there must be some relation between teacher characteristics such as attitude and personality types and questioning behavior in science, since no relation was found between the number of higher level questions asked and the educational or experiential backgrounds of the teachers. Kleinman asked, "...are there factors...common to those teachers who ask higher level questions (p. 308)?" Bruce's (1969) dissertation was designed in the hope of answering that question. Incorporating the variables of age, personality, experience, attitude, and science knowledge into his design, he evaluated the results of a three-week summer inservice program through measures of change in the questioning processes of the participants. He found no relation between personality and question

asking, and a negative correlation between age and experience and improvement in questioning as classified by the Harris-Bessent (1969) taxonomy.

A weak objection to what he considered an over-emphasis of the personality factor on classroom performance was voiced by Smith (1971). While agreeing that such an influence does indeed exist, he proposed planned training in generic skills which would allow for the incorporation of personal characteristics as a way to integrate teachers' behaviors, thereby maximizing their classroom effectiveness. This suggestion that the effects of undesirable personality factors can be lessened through appropriate training in generic skills implies that the methods used in such training would be significant factors to examine as was done in this study.

Loy (1969) reported an attempt to isolate the social and psychological characteristics of those who adopt innovations and the length of time that elapses between learning of an innovation and its adoption. He found that both social and psychological components were predictive of the acceptance of new methods and of the rate at which adoption took place. Embree (1969) examined personality and life experience patterns (social origin) for their ability to predict innovative potential in educators. Analyses showed parental attitudes and "self-image initiative" as distinguishing factors. He also found that "...occupations, family size, social characteristics, and parental control

were categories which did not distinguish...(p. VIII)."

Age and social origin and their effect on the educational viewpoints held--progressive vs. traditional--was examined by Peterson (1967). He found progressive views were most likely to be held by young adults from small towns or rural areas, and that having origins in the lower or lower-middle classes was more conducive to holding these views. However, he judiciously avoided being locked into that position in concluding "...no doubt personality factors are also involved...(p. 332)." The same conclusion regarding age and the acceptance of what he termed "emergent beliefs" had been demonstrated by Prince (1957) a decade earlier. He found, using a forced-choice format, that youth, in both principals and teachers, predisposed them to choosing progressive over traditional methods.

The relationship of age to professional status is not always clear however. Wattenberg (1967) focuses attention on those who return to teaching after raising a family. These teachers straddle the categories deemed significant. While being older, they have little experience and out of date training or, if they have taken their professional courses while their children were growing, their training is current and their experience is nil. Hence, it is problematical as to which group they belong to in terms of their professional lives. Also, as far as social origin is concerned "...the status they held during marriage is more

significant than that of their childhood homes (p. 295)."

In his study of the utility of micro-teaching with videotape feedback for inservice training, Codwell (1969) found that neither grade level taught nor teaching experience made a significant difference. White (1967) also found lack of significance in his examination of age and grade level as factors in the determination of preferred formats for inservice education in science. Additionally, he found that released time during the school year was more effective than college courses, pre-school institutes, or weekly discussion groups. Butts (1967) also reported experience, as well as school location as being unrelated to teacher change. Brantner (1964) found that experience did indeed have a greater effect on those inservice programs which dealt with generic professional methods than it did on those that dealt with subject matter.

Eash's statement bears repeating--"...our propensity is to turn human problems into technical problems and apply mechanical, statistical solutions (1967, p. 249)." "Hence our preoccupation with materials over people. Much of our activity is given to developing expertise and technical finesse in our teachers...(Meade, 1971. p. 223)." However, measurement of effectiveness in those terms excludes the "person" of the teacher as a factor in the success of the outcomes of inservice education. Research dealing with teacher characteristics indicates this exclusion to be a

faulty assumption and that these qualities do, in some way, affect the eventual outcomes of training programs for inservice teachers.

Values-Clarifying Questions

Throughout their history schools have directed their efforts toward the cognitive development of students (McMurrin, 1967). While this orientation has produced some extremely capable individuals it has failed to provide for the affective dimension of man's nature. This emphasis on cognition, at the expense of affect, has produced what Lyon (1971) terms "intellectual half-men" and Averill (1963) "isolated intellectuals".

Today, "American educators, taking their lead from the youth of the world, are becoming sensitized to the affective side of life and its place in the experience of schooling (Eisner, 1973, p. 195)." This sensitivity to affect, with a major emphasis on values, is beginning to dominate the field of education in the seventies, just as concepts and generalizations did during the sixties.

In the past it was assumed that certain values were universal and the function of the school was to inculcate these in young people (Rubin, 1973). Klevan (1957) in the dissertation he prepared under Rath's direction reported fully on the various forms schools have, in the past, adopted in order to accomplish this "indoctrination". "Now we find we are a society composed of identifiably different

groups, with different values, practices, and habits (Tyler, 1973, p. 38)."

It would be foolish to assume that through schooling we can rid people of their private values schemes and equip them to respond to their life situations impersonally. They cannot, in short, be taken from their individualism and they cannot be made to embrace ready-made values (Meade, 1973, p. 72).

Rubin (1973) suggests that schools grant the young the right to formulate their own values since "...its immoral to suppose we have any right to pass on values to other human beings, because passing on in this context means indoctrination (Scriven, 1973, p. 106)."

Kohlberg (1967) points out in discussing the moral development of children, that a sign of moral maturity in a child is his ability to make moral judgments and formulate moral principles on his own rather than his ability to conform to the moral judgments or value patterns of the adults around him.

Raths (1963) suggests that the most promising approach is one that attempts to help each learner build his own value system. This suggestion is supported by Allport (1955), Kubie (1959), Ginzberg (1950), Coombs (1962), Maslow (1973), and Kimball (1966) among others.

Consequently the focus now is on teaching a valuing process rather than on teaching specific values. Raths (1966) has outlined a process for clarifying values composed of seven sub-processes aimed at aiding the individual in clarifying his own value system. A group of his graduate

students field tested the format at all educational levels and found it to be generally effective.

Berman (1968) indicates that any communication process is closely interwoven with values and that much attention should be devoted to the art of questioning. Rath (1963) suggests that values are best clarified through the use of questions such as:

1. How long have you felt (acted) that way?
2. Are you glad you think (act) that way?
3. Is this something you prize?

The key criterion for selecting these questions is that they are questions for which only the student knows the answer. Harmin (1973) calls these values-clarifying questions "you" questions--questions which ask about the students' own ideas, actions, and intentions.

Jacobs (1957) in his summary of studies in the area of values points out that while teachers were genuinely concerned about values, they have not been able to translate that concern into effective patterns of action in their classrooms. The Adams and Biddle (1970) study, conducted with a sample of first, sixth, and eleventh grade teachers, concluded that less than one-half of one percent of classroom verbal behavior was spent in the discussion of feelings and interpersonal relations. Hudgins and Ahlbrand (1969) studied the verbal behavior of seventh and ninth grade English teachers and reported findings very similar to

those obtained by Biddle and Adams.

Meade (1973), Jones (1973), and Tyler (1973) feel that if the schools are truly to influence behavior, they must begin to concern themselves with the broader range of feeling, thinking, and valuing. "This concern demands major changes in teaching methods... These must be initiated in the preservice and the inservice training of teachers (Rubin, 1973, pp. 28-29)."

Generated by the new humanistic philosophy is also a new conception of learning, of teaching, and of education...

We need collaboration between the humanistic psychology and education...and it is the teacher, the practitioner who ultimately decides whether this is wisdom or nonsense (Maslow, 1973, p. 153).

Lyon (1971) points out that the humanistic movement is an umbrella under which can be found a diverse collection of people.

The movement is rather undisciplined and inchoate, an unorganized aggregate of highly individualistic innovators. The thin glue that holds them together is the notion that the integration of affective and cognitive processes in the learning experience is a highly desirable, potentially real, but seldom practiced state of affairs (p. 66).

Although the literature fails to uncover any study similar to the current study, certain trends which support the researcher's hypotheses have been noted.

Johnson (1969) reported a year long inservice program emphasizing the affective domain. It was designed to have teachers assess their own behavior and its affect on the classroom atmosphere, to increase their consideration of

each student as an individual and to assess their classroom activities. The first year's results were favorable enough to plan expansion of the program to four other large schools in the district.

Khanna (1970) working with one hundred fifty teachers in a year long human relations program found after detailed analyses that those involved became less authoritarian, more self-actualized, developed greater self-insight and leadership skills, and were more positively perceived by their supervisors and students.

The Ford-Esalen project in Affective Education from which the term confluent--the flowing together of cognitive and affective elements in human learning--resulted, resembles the current study in content. However, no hard data were generated. "...work in the Ford-Esalen project was essentially exploratory and clinically oriented... We hope extensive empirical research eventually will be pursued (Brown, 1971, p. 195)."

A number of workshops, based on the valuing process designed by Rath, has been conducted across the country by Simon, Howe, Kirshenbaum, Harmin, and others. Many materials dealing with values have been published by the above, but none have included information with respect to evaluation of their workshop approach.

The Simon (1958) dissertation study utilized an inservice format to teach teachers to ask values-clarifying

questions. During the fifteen-week program teachers were taught the techniques and asked to apply them to children exhibiting problem behavior.

Simon's findings were cast in confusion. He found eight of the ten experimental students manifested less of their original undesirable behavior but only one student underwent changes which were sweeping, dramatic, and recognized widely by other teachers in the school. According to the ratings of the three independent judges, only one of the teachers demonstrated an effective application of the value clarification methodology. Simon stated that the confusion was compounded further by the fact that the three teachers who achieved the lowest rank on the rating scale brought about positive changes in the students they studied (Gagnon, 1965, p. 39).

This study became the basis of the popularized inservice workshops given across the country by Simon and his associates.

A companion study, started at the elementary level by Brown, was never completed. An updated ditto report disseminated by Harmin at Rutgers University reported that all but one of the sixteen elementary teachers mastered the value questioning process. The fifteen selected children showed marked improvement, while none of the control group exhibited change in behavior.

Research in value clarification using the model of values questioning developed by Rath was continued by his son, James, who analyzed the effects of the strategy on secondary school underachievers with high potential and low achievement. From six pairs of students, matched for grade level, sex, IQ, SES, and class rank, the experimental

group using one from each pair was formed. The other member of the pair was assigned to the control group. The strategies were applied once a week for twenty minutes per subject by J. Rath. He met with the student, and asked values questions and also collected samples of written work. Five of the six experimentals improved in grades and class rank with significance established at the 0.11 level. The one student who failed to show positive change was the one with whom he had found it impossible to establish rapport (J. Rath, 1961).

The same procedure was followed by Lang (1961) at the college level and involved underachievers, dissenters, and apathetic students. The questioning process worked effectively with underachievers but not with apathetic or dissenting students.

J. Rath (1962) continued the research at the campus school of the University of Wisconsin-Milwaukee. For this experiment, he trained teachers to plan learning experiences which would provide the means through which students could make value statements. Eighty-eight of the one hundred students made gains on the five traits as evaluated by subjective perceptions of the teachers.

Gagnon (1965) designed an experiment that related value questioning to critical thinking. Inservice teachers were trained to use a pattern of fifteen values-clarifying questions and eleven thinking indicators. He found the

experimental teachers used more clarifying questions, used a greater variety of the clarifying questions, encouraged more thinking indicators in their classes, and generally asked more and told less. He concluded that classroom questioning related to values could be changed through an inservice program and that the change would promote more critical thinking on the part of the pupils.

In summation, the literature indicates increasing awareness on the part of educators of the need for affective as well as cognitive education. While clinical studies hint of the effectiveness of affective techniques as a means for aiding youth in the development of their own values system, there is a paucity of empirical studies relating to the training of teachers for adequate functioning in this area.

Interrelation of Cognition and Affect (Values)

There is almost universally an arbitrary and unrealistic separation of cognitive and affective concerns. Past literature tends to deal with thinking and feeling as separate strands within the same man. The tendency is further encouraged in education by curriculum statements, some of which focus solely on subject matter and others whose sole focus is affective growth. There even exist two separate taxonomies of educational objectives, one in the cognitive domain and the other for the affective domain. In spite of this dichotomy there is evidence of a reciprocal rela-

tionship between cognition and affect.

Rogers (1969) states that emotional growth, of necessity, facilitates both cognitive achievement and learning efficiency. Gagnon (1965) verified increased cognitive (thinking) development as resulting from affective (values) activities in fifth and sixth grade classrooms.

There is a constant parallel between affective and intellectual life throughout childhood and adolescence. This statement seems surprising only if one attempts to dichotomize the life of the mind into emotions and thoughts. But nothing could be more false or superficial...of course affectivity is always the incentive for actions...since affectivity assigns values to activities and distributes energy to them. But affectivity is nothing without intelligence. Intelligence furnishes affectivity with its means and clarifies its ends...

Intelligence thus begins neither with knowledge of the self nor of things as such but with knowledge of their interaction, and it is by orienting itself simultaneously toward the two poles of that interaction that intelligence arranges the world by organizing itself (Flavell, 1963, p. 62).

Jones (1968) points out that to focus on one, either cognition or affect, to the exclusion of the other results in bad education. "Perhaps the heaviest intellectual burden that we need to relinquish is the one that dichotomizes affect and intellect (Eisner, 1973, p. 198)." There is currently a movement in the field of education to end this dichotomy.

If persons are to behave as integrated wholes then thinking-feeling cohesion is essential. To dichotomize the cognitive and affective promotes a way of conceptualizing about persons which is not always fruitful in view of the grossness and overlapping nature of each of the concepts (Berman, 1968, p. 3).

One's behavior is influenced by both our thoughts and feelings. So far as our actions are concerned, reason and action are of a piece... It is imperative that thought (cognition) and emotion (affect) be integrated so that one informs the other (Rubin, 1973, p. 5).

Extrinsic learning--that based on the objectives of the teacher--is essential to a well informed mind. Intrinsic learning--that based on pivotal experience through which we come to know ourselves--is equally indispensable to becoming fully human (Maslow, 1973, p. 169).

In spite of these cries for confluent education, the effects of tradition remain: "That tradition, stemming from Plato's distinctions between the life of feeling and the life of thought, provided the bedrock upon which some educational practice has been based (Eisner, 1973, p. 196)."

This dichotomy was virtually unquestioned for twenty-three hundred years until Dewey in Experience and Nature (1925) and Theory of Valuation (1939) described emotions as "blind and gross" and the function of thought as giving them meaning and direction. The concepts that emotion and reason are separate, that thoughtful reflection and knowledge of fact have no relevance for matters of valuing, are in error. Elimination of the dichotomy that has existed in our thinking between emotions and intellect is necessary. In Democracy and Education (1916), Dewey is even more explicit as to the reciprocity of cognitive and affective functioning.

To 'learn from experience' is to make a backward and forward connection between what we do to things and what we enjoy or suffer from things in consequence. Under such conditions, doing becomes a trying; an

experiment with the world to find out what it is like; the undergoing becomes instruction--discovery of the connection of things.... Experience is primarily an active-passive affair; it is not primarily cognitive (p. 140).

Simple mastery of intellectual ideas is not the primary function of education. Later in the same book he states:

Knowledge is humanistic in quality not because it is about human products in the past, but because of what it does in liberating human intelligence and human sympathy. Any subject matter which accomplishes this is humane, and any subject matter which does not accomplish it is not even educational (p. 269).

In the mid-1960's learning theorists began to study the relation of affect and cognition. Piaget's (1969) book came as a surprise to those cognitive psychologists who often cited his work as a source of how intellectual development occurs. The old dichotomy is destroyed in statements as, "There is no behavior patter, however intellectual, which does not involve affective factors as motives.... The two aspects, affective and cognitive, are at the same time inseparable and irreducible (p. 158)."

According to Guin-Decarie (1965) the earliest discovery of the cognitive principle of permanence comes from the infant's affective ties to people. Between the ages of two and six, the cognitive task of language development enables the child to find ways to cope with conflicts that exist between his needs and his environment. As the child incorporates aspects of the world to fit his views, he changes his ideas. Cognitive development occurs during this transaction, as does a concept of self-esteem. The

process does not end with infancy, but continues through childhood and adolescence. As children attempt to order their world, their search for coherence becomes affective. This provides the motive which can be used in schools for cognitive growth, provided the tasks and cognitive demands are seen as relevant to their affective needs. Therefore, any teaching-learning episode is an inextricable mix of both dimensions. Cognitive psychology has indicated that in all likelihood cognitive organization, development, and growth are founded on a search for meaning which is rooted in affect. Each forward cognitive movement throughout life has inseparable affective elements. These conclusions by cognitive psychologists contain obvious implications for the educational establishment.

A good learning environment cannot focus on only one facet. Soar (1967) found that various affective styles of teachers were related to pupil growth in reading and vocabulary. Schaefer (1969) reported maternal growth in reading and vocabulary. Schaefer (1969) also reported maternal affective behavior as being predictive of IQ performance at age three. Schaefer and Soar both focused on the same element--the affective behavior of significant adults in the child's environment, mother and teacher--and came to a common conclusion. Specifically, adult behavior which was hostile and/or aloof produced deleterious effects on the child's cognitive development. Wattenberg (1962) and Lamy

(1965) reported perception of self as the primary predictor of beginning reading achievement. Quant's (1972) interpretive paper summarizes the findings of other researchers and concludes that a child's reaction to learning experiences are based more on the views that significant adults appear to hold, than on his success or failure on the tasks themselves. "From a very early age the child learns two concepts from such reactions: how competent he is...and how valuable he is as an individual" (p. 8)."

Strang (1969), in analyzing the action of the fifty-four factors involved in Holmes and Singer's report on reading speed and power, deduced that the missing twenty-four percent of variance could be accounted for as the intangibles of values and ideals. Burton (1971, pp. 62-63) suggests a hierarchy of five question types that would incorporate this missing twenty-four percent into literature lessons. These questions are:

1. Those that are factual
2. Those that require students to prove or disprove generalizations made by others
3. Those that require students to derive their own generalizations
4. Those that relate a specific work to the total human experience
5. Those that cause students to relate the derived generalizations into their own life.

Researchers in reading education have not been alone in acknowledging the existence of a relation between affect and cognition. Social studies specialists have also been cognizant of the reciprocal relationships. Hunkins and Spears' (1973) position paper for the Association of Curriculum Development and Supervision states:

To make the social sciences the sole basis of citizenship education is to place values and the valuing process outside the pale of social education, since the social sciences are value free; they are not concerned with how people make social judgments. The concern has been to describe social behavior at a given place and time--a useful enough addition to the tables of intelligences of the citizen but hardly an adequate one (p. 3).

The extent to which the content of the social studies will be useful will depend upon redefinition of rationality as a comprehensive act of thinking, feeling, valuing, and doing,...

Translated into day-to-day practices in the schools, it means fostering growth toward greater self definition, clarification of identity, and response to one's inner self....

The practice of separating the emotional from the intellectual, and the societal from the individual is fallacious and leads to a loss of control by man over his own behavior. Man victimizes himself by emphasizing the emotional, the intellectual, the social, or the individual to the neglect of any of the others (pp. 7-8).

Therefore, Hunkins and Spears conclude, basic purposes for social studies must include "socialization, decision making processes, values and valuing, and citizenship in addition to knowledge acquisition (p. 4)." Obviously, any educational program constructed within these parameters would have to give ample consideration to affective and

cognitive elements and to the reciprocal relation between them.

A major problem in reconstructing the curriculum in any given subject area is the determination of the initial approach to coordinated educational experiences--affectively or cognitively. According to Bloom (1973), if all cognitive entry behaviors to a specific learning task are equal in a given group, achievement would still show fifty percent of the variance of another group in which the cognitive entry behaviors had varied widely. Affective entry behaviors to new tasks are "...a compound of interests and attitudes... and more deep seated self-concepts and personality characteristics (p. 132)." Bloom feels that while a learner can achieve mastery with negative affectivity, it is very difficult. A review of past research led him to propose that affect might account for up to twenty-five percent of the variation in achievement, and the combined effect of both cognitive and affective entry behavior would account for sixty-five percent of the variance. When he added "quality of instruction", which includes teachers' verbal cues, learner activity, and reinforcement, to the cognitive and affective entry behaviors, Bloom concluded that ninety percent of all variation in school achievement would be accounted for.

Sears and Sherman's (1964) model depicting linkages between cognitive and affective variables demonstrates how

these linkages function in both directions. The entry point therefore, to any learning task for students can be along either the affective or cognitive dimension. Regardless of which dimension functions as entry to the learning task, the other must be brought into play and function throughout the learning.

Educators have traditionally emphasized development of the cognitive capacities of their students. They have been prepared to do this and with little effort they can do it efficiently. The affective capabilities of the student has been either neglected or left to the child or his family or to chance. "All too often, chance prevails, and the result becomes a half-man, who like his teachers, has been educated, at best, to function effectively only on the intellectual plane (Lyon, 1971, p. 18)."

It would be well to observe at this point, that in a healthy curriculum there is simultaneous interplay between cognition and affect. If they are treated as separate entities...the goal we seek will elude us.

The point here is that by adding an affective dimension to the present cognitively oriented curriculum... we can enhance learning, infuse schooling with a new kind of life and zest, improve motivation, and greatly enrich the academic areas under study. Conversely, by bringing children's authentic feelings into the open and by making them a basis for cognitive exploration and understanding, we can help the student to deal with the pervasive and overriding concerns with which he must now struggle on his own--his emotional liabilities and the attitudes of mind that undermine his behavior (Rubin, 1973, pp. 17-18).

The emphasis on cognitive learning in the classrooms, and the fact that this emphasis is controlled by the teacher

is apparent in Adams and Biddle's (1969) study of first, sixth, and eleventh grade classes. Teachers dominated eighty-four percent of the classroom communication, and less than one-half of one percent of the verbal episodes was spent in discussion of feelings and interpersonal relations. Eisner (1973), in directing attention to our present conception of intellect, which is preponderately associated with verbalisms, asks that educators consider a different concept of intelligence--one that provides links between the words, and the thoughts, and the feelings they symbolize.

However, merely giving consideration to a change concept of intellectual activity is not enough for teachers to become effective in integrating the cognitive and affective domains. "No one can give what he does not have: a faculty of one dimensional men cannot teach rounding youngsters how to be properly round (Lyon, 1971, p. 19)." Preservice training, and indeed the entire schooling of teachers, has given no preparation for developing activities that are confluent in nature. Tyler (1973) indicates that such change in classroom planning necessitates

...the acquisition of new attitudes, knowledge, and skills on the part of the person involved. To acquire them inservice education...furnishing opportunities for teachers to develop new skills that are widely usable...is necessary (pp. 47-48).

In discussing the retraining of teachers so that they can be instrumental in changing the "joyless" atmosphere prevalent in schools today, Jones cautions,

We can choose to strive for cognitive and affective growth in clumsy and inept ways--or we can develop respectable techniques that have reasonable potency. In this regard it would seem that because teaching that successfully integrates facts and feelings is still in its infancy, our greatest need is to invent a repertory of methods with which to integrate both domains (1971, p. 190).

Summary

The literature relating to inservice education has led to the conclusion that although it is ubiquitous and diversified, it is not effective. Replicable research is rarely reported due to variability of the human factors involved. In spite of individually reported successes, the local nature of the projects and the lack of detail makes transferability of the findings unfeasible. Although the one-exposure workshop conducted by outside consultants is frequently the major portion of inservice programming, neither the format nor the methods used have been researched.

Characteristics of teachers (personality, age, experience, and social origin) are human factors which cause past projects to be non-replicable. These personal factors cause variation in the effects of a given inservice program. However, different researchers report different directions in the influence of these characteristics on the learnings to be acquired. Yet, it is apparent that these personal factors do affect, in some way, day-to-day classroom functioning and also affect the outcomes of inservice efforts to effect changes in that day-to-day functioning.

The major portion of the teaching activity in classrooms is questioning. It is a fertile field for the introduction of change since most questioning is at low cognitive levels and affective questioning is rare. Past research has indicated that positive change in teacher questioning in both domains can be instituted through inservice education.

In fact, the reciprocal relationship of affect and cognition hints at the viability of improving questioning strategies in both domains simultaneously by relating the affective elements to higher level questioning in the content areas of the ongoing curriculum and by using values questions to develop cognitive concepts. To date, no studies have been reported that used this approach.

The present study and the companion study have been designed to examine and draw conclusions as to appropriate methodologies for one-exposure workshops designed to improve questioning strategies in the affective and cognitive domains by stressing the interaction of cognitive and affective activities within the context of the on-going curriculum. The procedures used are explained in the next section.

CHAPTER III

RESEARCH DESIGN

A modified version of Campbell and Stanley's (Van Dalen, 1969) pretest, posttest control group design was used in this study. The study was divided into two major segments. The first part was concerned with developing an approach to one-exposure inservice workshops. The second part was devoted to the collection of data to evaluate the effectiveness of this approach.

Development of Workshop Approaches

Workshop A

It is recommended in the Illinois school law code, that school districts allocate five days for teacher inservice education. Based on this recommendation, the researcher assumed the following:

1. School districts conducted inservice education programs.
 2. A methodology for planning these programs existed.
- Suburban Chicago administrators and/or curriculum directors were contacted and asked to indicate their usual procedure for organizing their inservice days. From these procedures, Workshop Approach A, the traditional approach as defined in

Chapter I, was developed.

Workshop B

After the review of the literature on inservice education, Workshop Approach B, the experimental approach, was developed by taking into account the suggestions of experts. It was assumed that these suggestions were valid, based on the experts' experiences in the field of inservice education. (See Chapter II, pp. 25-26.)

Workshop Approach C

This approach served as the experimental control, fulfilling the requirements of the research design.

These workshop approaches constituted the study's independent variable. The experimental approach B involved the cooperation of the workshop consultants. This requirement was fulfilled through the coordination of this study with the research of Weiss (1974). Both researchers (King/Weiss) functioned as the consultants for the one-exposure inservice workshops.

Two similar west suburban Chicago school districts identified by their willingness to participate, were utilized in the study. Similarity of districts was assumed based on the socio-economic status of their communities as identified by DeVries (1973), number of schools, and staff size. One district was randomly selected to serve as a pilot for the study. The other district provided the study's sample.

The pilot district was used to field test a questionnaire, establish timing of the workshop topics and to provide tapes of classroom verbal interactions for the training of the study's raters. Anonymity was guaranteed to both the districts and to the participants of this study. This was done in order to insure district cooperation and to provide the subjects with the freedom to respond honestly to the study's instruments.

Assignment of Workshop Approaches

The district involved in the study was composed of seven schools. Its total teaching population was scheduled to take part in an inservice workshop. To avoid the contamination of data resulting from possible teacher interactions, it was necessary to insure that the teachers working in the same building received the same workshop approach. Treatment was randomly assigned to a school's faculty by placing the names of the schools in one container, and the workshop approaches in another container. Two schools were drawn for each treatment. The remaining school was added to treatment C.

TABLE 1

Assignment of faculties to workshop approaches

<u>School</u>	<u>Workshop Approach</u>
#1 & 4	A--traditional approach
#2 & 3	B--experimental approach
#5, 6 & 7	C--control group

Selection of the Workshop Topic

The values-clarifying question was chosen by the experimenter-consultant as the topic for the inservice workshop. This choice was based on the current interest of educators in affective techniques and on the need for research in this area. It was assumed that, because of the relative newness of affective techniques, most teachers would not be aware of the values-clarifying question and hence this topic would be appropriate for an inservice presentation. It was also assumed that the ability to ask values-clarifying questions was a technical skill which could be developed through training and practice. The values-clarifying question as used in this study was defined by Rath (1968). He suggested that students' thinking and valuing processes could be clarified through the use of these questions. The Rath model and clarification process are explained in detail in Appendix A. The major criterion in the use of values-clarifying questions is that they must be personal questions which ask about the learner's feelings, own ideas, actions or intentions. The idea upon which they are based is to help students clarify what they think and value through their reflections upon their beliefs, concerns, and feelings.

The topic for Workshop B was approved by the superintendent and the inservice director of the participating district. The values-clarifying question was the dependent variable of this study.

TABLE 2

Values-Clarifying Questions
(Raths, et al. 1966)

1. Is this something that you prize?
2. Are you glad about that?
3. How did you feel when that happened?
4. Did you consider any alternative?
5. Have you felt this was for a long time?
6. Was that something that you yourself selected or chose?"
7. Did you have to choose that? Was it a free choice?
8. Did you do anything about that idea?
9. Can you give me some examples of that idea?
10. What do you mean by _____: can you define that word?
11. Where would that idea lead; what would be its consequences?
12. Would you really do that or are you just talking?
13. Are you saying that...(repeat the statement)?
14. Did you say that...(repeat in some distorted way)?
15. Have you thought much about that idea (or behavior)?
16. What are some good things about that notion?
17. What do we have to assume for things to work out that way?
18. Is what you express consistent with...(Note something else the person said or did that may point to an inconsistency)?
19. What other possibilities are there?
20. Is that a personal preference or do you think most people should believe that?
21. How can I help you do something about your idea?
22. Is there a purpose back of this activity?
23. Is that very important to you?
24. Do you do this often?
25. Would you like to tell others about your idea?
26. Do you have any reasons for saying (or doing) that?
27. Would you do the same thing over again?
28. How do you know it's right?
29. Do you value that?
30. Do you think people will always believe that?

Implementation of the Experimental Methodology--Approach B

It was assumed that by becoming familiar with a district's curriculum, teaching methodologies, organizational structure, and needs, as identified by that district's personnel, an inservice workshop could be designed which

would result in teacher growth.

The experimenter-consultant met with the district superintendent, director of inservice and six teacher representatives from schools 2 and 3.

A brief lecturette, focused on humanistic education and the values-clarifying question, was presented by the experimenter to the group. A brainstorming session was then held on the question "What do you feel you would have to know/do in order to use values-clarifying questions in your classroom?" The group's responses to the questions were labeled the district's needs in terms of the topic. These responses are listed in Appendix B.

Copies of the district's texts and curriculum guides were collected. Information on the district's goals, educational philosophy, organization, and teaching methodologies was obtained through informal interviews with the district's personnel.

Using the ERIE (Ritz, 1970) model as a guide, the inservice workshop format was designed, the workshop format is described in Appendix C.

The inservice format was submitted to and approved by the district's inservice education committee.

The researcher met with the experimenter/consultant of the companion study to coordinate and interrelate their workshop presentations.

The workshop presentations were field tested in the

pilot district to establish timing. Each consultant was allowed one and one-half hours of presentation time.

The Inservice Workshop

For the experiment, two sessions based on values-clarifying questions were conducted. The faculties of schools 1 and 4 attended the morning session, and received Workshop Approach A. The faculties of schools 2 and 3 attended the afternoon session and received Workshop Approach B. The faculties of schools 5, 6 and 7 were not given a session on values-clarifying questions, but were given a workshop on an unrelated topic by other consultants. They constituted the no-treatment control group.

In brief, there were two major differences between the sessions. During the afternoon session, the workshop consultants:

1. worked together by interrelating their topics;
2. the participants were given concrete applications of the topics to their own classroom materials.

The workshop plans followed by the researcher for each session have been placed in Appendix D.

Selection of the Sample

Participants for this study were solicited by the district's administrators. This was done to avoid biasing the study through the participants associating the pre/post treatment data with the researcher and the inservice workshop.

The principal of each school informed his staff that the district was cooperating in an education research project. He extended an invitation to all classroom teachers to participate in the research. They were told that participation would involve the completion of some personal data forms and the taping of two classroom lessons. Anonymity, both from the researcher and from the district was guaranteed to those willing to participate. To satisfy the condition of anonymity, code names (states and countries) were assigned to the schools for each of their participants. These participants constituted the pool from which the study's sample was drawn.

TABLE 3

Assignment of Code Names

<u>School No.</u> <u>Workshop Approach</u>	<u>No. of</u> <u>Volunteers</u>	<u>States/Countries</u>
1 (A)	11	Alabama, Delaware, Iowa, Michigan, New Hampshire, Oklahoma, Texas, Wyoming, Connecticut, Indiana, Massachusetts
2 (B)	10	Alaska, Florida, Kansas, Minnesota, New Jersey, Oregon, Utah, Nevada, Ohio, Tennessee
3 (C)	12	Arizona, Georgia, Kentucky, Mississippi, New Mexico, Pennsylvania, Vermont, Wisconsin, Colorado, Illinois, Maryland, Nebraska
4 (A)	9	Arkansas, Hawaii, Louisiana, Missouri, New York, Rhode Island, Virginia, North Dakota, South Dakota

TABLE 3 cont.

Assignment of Code Names

<u>School No.</u> <u>Workshop Approach</u>	<u>No. of</u> <u>Volunteers</u>	<u>States/Countries</u>
5 (C)	8	California, Idaho, Maine, Montana, North Carolina, South Carolina, Washington, West Virginia
6 (C)	9	Puerto Rico, District of Columbia, Poland, France, Hungary, India, Australia, Iceland, Yugoslavia
7 (C)	9	Greenland, Chile, England, Germany, Israel, Bohemia, Sweden, Finland, Ireland

The Sample

From a total population of one hundred forty-five elementary teachers, sixty-eight teachers volunteered to take part in the study. The volunteers were grouped according to the workshop approach assigned to their school.

TABLE 4

<u>School</u>	<u>Workshop Approach</u>	<u>Total No. of Volunteers</u>
1 & 4	A (traditional)	20
2 & 3	B (experimental)	22
5, 6 & 7	C (control)	26

Upon completion of the pre-and post-treatment data and the inservice workshops, ten teachers from each treatment group were randomly selected to serve as the sample of the study. Ten subjects were chosen per treatment as adequate

representatives of the population for the following reasons (Hays, 1963):

1. a smaller number of subjects would introduce an inflated variance error.
2. a larger number of subjects would pick up trivial differences not related to the data being measured.

The study's sample was representative of the population from which it was drawn by virtue of its sharing the following characteristics with the total population:

1. All possessed Illinois State Teaching credentials.
2. All were elementary school teachers.
3. All chose to apply to the same district for employment.
4. All were employed by the same district.
5. All were given the same opportunity to participate in the research.

Data Collection

Instruments

Three instruments, the Myers-Briggs Type Indicator (1962), the Heslin-Blake Involvement Inventory (Pfeiffer, 1973), and a questionnaire, were administered prior to the inservice workshop. These instruments served to provide necessary data on the study's co-variables: personality, age, years of teaching experience, and social origin. These co-variables were identified through a review of the literature on teacher characteristics which was summarized

in Chapter II.

The Myers-Briggs Type Indicator was utilized for the collection of personality data. According to its author,

The purpose of the indicator is to implement Jung's theory of type. The indicator aims to ascertain people's basic preferences in regard to perception and judgment. The indicator contains separate indices for determining each of the four basic preferences, which under this theory, structure the individual's personality (Myers, 1962, p. 1).

These indices may be summarized as follows:

<u>Index</u>	<u>Preference as Between</u>
EI	Extraversion or introversion
SN	Sensing or intuition
TF	Thinking or feeling
JP	Judgment or perception

The type indicator yields four scores (sixteen possible combinations). The reliability coefficient on the indices ranges from 0.71 to 0.94 using the split-half method and the indicator has been positively correlated with the following instruments to ascertain validity:

1. Gray-Wheelwright Psychological Type Questionnaire.
2. Strong Vocational Interest Blank
3. Allport-Vernon-Lindzey Study of Values
4. Edwards Personal Preference Blank.
5. Personality Research Inventory

A description of the indices, and the reliability of validity figures have been placed in Appendix E.

The Heslin-Blake Involvement Inventory was chosen to

identify behavior types. According to its authors:

The Involvement Inventory is based on a philosophy that three important phenomena in life with which a person must interact: 1) people, 2) objects, and 3) ideas.

...In summary, the Involvement Inventory measures three characteristics of people:

- (A) Affective, or feeling involvement with people,
- (B) Behavioral involvement in accomplishing tasks, and
- (C) Cognitive involvement with analyzing pronouncements encountered (Jones & Pfeiffer, 1973, p. 87).

The test consists of the above three scales. The ABC scales taken together represent a generally active involvement in and orientation toward life.

A low scorer on the A scale tends to be affectively passive, emotionally controlled, and interpersonally cautious. A low scorer on the B scale tends to be a follower, finds it difficult to plan ahead, and finds doing projects distasteful. A person who scores low on the C scale tends to be accepting of information he receives, uninterested or unwilling to challenge information that comes to him and willing to believe pronouncements of others (Jones & Pfeiffer, 1973, p. 88).

The inventory has been subjected to extensive testing and refinement. Test reliability of the form used in this study is:

Scale A = 0.76

Scale B = 0.78

Scale C = 0.76

TOTAL = 0.78

Test validity according to correlation among the scales is:

A-B 0.37

A-C 0.18

BC 0.49

AVERAGE 0.34

These correlations indicate moderate overlap in content.

The scores reported in Appendix H for the sample population can be interpreted in relation to the published median scores for the norming groups.

	<u>Median</u>	<u>Q₁ - Q₃</u>
Affective	116	107 - 122
Behavioral	100	88 - 109
Cognitive	86	78 - 92
TOTAL	300	289 - 320

A questionnaire was constructed by the researcher to collect the following information: age, number of years of teaching experience, and social origin. Objective type items were utilized in order to facilitate completion of the instrument, tabulation, and analyses of the responses. Loyola University School of Education's questionnaire form was used as a guide. The questionnaire was field-tested in the pilot district and found adequate as described for the collection of the necessary data.

Procedure

Three months prior to the inservice workshop, envelopes containing the following materials were prepared. Samples are in Appendix F.

1. Letter of Instruction
2. Myers-Briggs Type Indicator
3. Heslin-Blake Involvement Inventory
4. Questionnaire
5. Blank tape
6. Code name

The envelopes were distributed to the participants by their administration. Only the participants knew which of the schools' assigned code names they had received. The participants were directed to complete the enclosed forms and to tape a discussion lesson. No attempt was made to indicate that the values questioning process was to be evaluated. The importance of planning for verbal interaction between student and teacher, however, was suggested. It was recommended that reading, social studies, or science be used as the subject areas for the taping.

Four weeks after the inservice workshop, a second tape was distributed to the participants. A second taping in the same subject area as that of their first tape was made by the participants. The classroom interaction recorded on the tapes were an important source of data. The first tape provided the pre-treatment measure, the second tape, the post-treatment measure of the actual frequency of values-clarifying questions expressed by the participants.

It was assumed that the frequency of values-clarifying questions would be approximately the same for all treatment

groups on the pre-treatment tapes. Further, these frequencies would be comparable to the data revealed in the analyses of the control group's post-treatment tapes.

In addition, the researcher assumed that for significant change to take place in the frequency of values-clarifying questions expressed, exposure to the experimental Workshop Approach B would be needed. There would be few or no differences between the participants' use of values-clarifying questions if exposure to the experimental Workshop Approach B did not take place.

The Raters

Three elementary school teachers from non-participating school districts rated the subjects' tapes. The raters were trained to identify values-clarifying questions by practicing on the tapes of the study's pilot district. Each of the raters independently evaluated the tapes involved in the study. These tapes were coded accordingly:

pre-tape - school number
 teacher code name

post-tape - school number
 teacher code name

Interrater reliability was established through application of Kendall's Coefficient of Concordance which indicated the degree of association between the rankings of the three raters. The Coefficient of Concordance "W" expresses the average agreement of the raters on a scale from .00 to 1.00 (Meredith, 1967, p. 289). The data was arranged in an

N by k table, where the N rows responded to N object (questions), the k columns corresponded to the raters. The entries in each column consisted of each rater's ranking of the questions. "W" is then expressed as the ratio between the between-groups (or ranks) sum of squares of a complete analysis of variance of the ranks. Kendall's Coefficient of Concordance is defined by:

$$W = \frac{12 S}{k^2 (N^3 - N)}$$

"S" is the sum of the deviations squared of the totals of the "N" ranks from their mean. It is a between-groups sum of squares for ranks. In case of ties in rankings, the median (or mean) of the ties is used (Ward, 1970).

Hypotheses Tested

The following null hypotheses were tested in this study:

1. There is no significant difference between type of workshop approach and the number of values-clarifying questions asked by the subjects.
2. There is no significant relationship between the frequency of values-clarifying questions asked and the selected personality factors of the subjects.
3. There is no significant relationship between the frequency of values-clarifying questions asked and the age of the subjects.
4. There is no significant relationship between the frequency of values-clarifying questions asked and the years of teaching experience of the subjects.

5. There is no significant relationship between the frequency of values-clarifying questions asked and the social origin of the subjects.
6. There is no significant relationship between change in the frequency of values-clarifying questions asked and the frequency of higher level cognitive questions asked by the subjects.

Analytical Techniques

The following statistical procedures were utilized in this study:

1. single classification analysis of variance,
2. Tukey's post-hoc comparisons, and
3. Pearson's product-moment coefficient of correlation.

The statistical models and the hypotheses to which they were applied are summarized in Table 5.

TABLE 5

<u>Hypothesis</u>	<u>Statistical Model</u>
1	Single classification analysis of variance and Tukey's post-hoc comparisons.
2	Pearson's product-moment coefficient of correlation.
3	Pearson's product-moment coefficient of correlation.
4	Pearson's product-moment coefficient of correlation.
5	Pearson's product-moment coefficient of correlation.
6	Pearson's product-moment coefficient of correlation.

Hypothesis 1

The subjects' pre- and post-treatment tapes were analyzed by the raters and the the number of values questions expressed by the subjects were counted. Difference scores were then computed for each subject between the first and second measure. These scores were analyzed according to a single classification analysis of variance. The analysis of variance model was chosen because according to Hill and Kerber,

The technique of analysis of variance which employs the F-distribution, is one of the best means for effecting tests of the hypotheses that: a) two population variances are equal, and (b) that k population means are equal (1967, p. 358).

This study's major hypothesis assumed that the three population means were equal.

Analysis of variance deals with composite tests of significance. The basic principle of such a test is to determine if the sample statistic varies further from the population parameter than one would expect, in view of the variations of single cases from the same mean (Guilford, 1965). Generally, these tests consist of a comparison of two independent estimates of the universe variance by means of the F-distribution.

The rationale upon which analysis of variance is based is

...that the total sum of squares of a set of observations resulting from combining the observations for several groups can be analyzed into specific parts, each of which is identifiable with a given source of variation (Hill & Kerber, 1967, p. 358).

The basic assumptions underlying this technique are as follows:

1. The samples, composing the total set of observations were random ones
2. These samples were drawn from a normal population
3. The values of the two independent estimates of the universe variance differ only within the limits of random sampling error (Hill & Kerber, 1967).

In analysis of variance of a single classification, as was the case of this study, the data were differentiated on the basis of only one experimental variation (i.e. Workshop Approach) with two observations within each class (pre/post tapings). The total sum of squares for all the data were then analyzed into two parts: a sum of squares for the variation within the groups, and a sum of squares based upon the variation between the group means. From these two sums of squares, independent estimates of the population variance, represented by \hat{G}_1^2 and \hat{G}_2^2 , were calculated (Hill & Kerber, 1967).

The variation among column means was obtained by the expression:

$$\sum_{c=1}^{kc} [N_c (\bar{X}_c - \bar{X})^2]$$

where $\sum_{c=1}^{kc}$ represents the summation over the kc columns, N_c the number of items, \bar{X}_c the mean of a given column, and \bar{X} the grand (overall) mean of the entire distribution

(Parl, 1967). This expression represents the variation--the sum of the squared deviations of the subjects from the arithmetic mean.

The estimated variance of the universe, \hat{G}_1^2 , was obtained by dividing the computed variation by the appropriate number of degrees of freedom ($n_1 - k$). In this study the variation was measured by three column means with one restriction represented by \bar{X} (grand mean) of the sample, the number of degrees of freedom then was $(n_1 - k) = (3 - 1) = 2$.

The second estimate of the universe variance, \hat{G}_2^2 , was obtained by determining the variation found within the columns, and dividing by the appropriate number of degrees of freedom ($n - k$).

The second variation was obtained by the expression:

$$\sum_{c=1}^{kc} \left[\sum_{i=1}^{N_c} (X_i - \bar{X}_c)^2 \right]$$

According to this formula, the squared differences of individual items from their respective column means are summed the N_c columns (Parl, 1967). The appropriate number of degrees of freedom was determined by taking the difference of thirty subjects (N) from the three sample means:

$$df = (N - k) = (30 - 3) = 27$$

Upon determination of the two independent estimates of the population variance, \hat{G}_1^2 and \hat{G}_2^2 , the study's first null hypothesis was tested by the F-ratio where

$$F = \frac{\hat{G}_1^2}{\hat{G}_2^2} \quad \text{for} \quad \begin{array}{l} n_1 = 2 \\ n_2 = 27 \end{array}$$

The F table was then entered to determine if this null hypothesis should be accepted or rejected at the 0.05 confidence level.

A significant F tells one that there are non-chance variations somewhere in the list of sets. It indicates that there exists a significant difference between the class means (Guilford, 1965). It does not indicate, however, where the significance lies.

In order to determine where the significance lay, post-hoc comparisons were utilized. According to Hays,

Even though tests for planned comparisons form a useful technique in experimentation, it is far more common for the experimenter to have no special questions to begin with. His initial concern is to establish only that some real effects or comparison differences do exist in his data. Given a significant overall test, his test then is to explore the data to find the source of these effects and to try to explain their meaning.

...If the experimenter has found evidence for overall significance among his experimental groups, he may use the method of post-hoc comparisons to evaluate any interesting comparisons among means (Hays, 1963, p. 483).

In order to utilize post-hoc comparisons, the following restriction must be met: a preliminary analysis of variance and F-test must have shown over-all significance.

After the over-all F has been found significant, any

comparison may be made.

Unlike planned comparisons, there is no requirement that such post-hoc comparisons be independent...any comparison is legitimate (Hays, 1963, p. 484).

Tukey's method was chosen for testing the significance of the post-hoc comparisons. According to Meyers (1966), if the n 's are equal and if the normality and homogeneity of variance assumptions appear reasonable, the Tukey approach provides a powerful test for contrasts of the type, $u_j - u_j^1$. Tukey's procedure is recommended for use when the experimenter is interested only in comparing two means at a time, as is the case in this study.

Tukey's multiple comparison method

...is based on the distribution of q , the studentized range. This distribution is defined by first taking the range (R) for a set of a independent, normally distributed values. R is then divided by S , the estimate of the standard deviation of the values whose range is being considered. The sampling distribution of q is the sampling distribution of R/S and depends upon a (the number of values ranged over) and upon the df associated with S . Assuming a completely randomized one-factor design and assuming that the estimates of the treatment population means are independent and normally distributed and have homogeneous variances, the probability is 1 - that:

$$\hat{q}_p - q \bar{S}_Y \left(\frac{1}{2} \sum_j \frac{1}{W_{jp}} \right) \leq \hat{q}_p \leq \hat{q}_p + q \bar{S}_Y \left(\frac{1}{2} \sum_j \frac{1}{W_{jp}} \right)$$

for all values of p (i.e., for all possible contrasts), where $q = q_{\alpha}$; a , $a(n - 1)$, the Q required for significance at the α level when there are a means within the range and the error df are $a(n - 1)$, $\bar{S}_Y = \sqrt{MS_S / A / n}$, and $1/W_{jp}$ is the absolute value of the j the weight for the p th contrast. To test the null hypothesis that $\downarrow = 0$

we note whether

$$\hat{\downarrow} > \bar{sy} \left(\frac{1}{2} \sum_j \frac{x_j}{WJ} \right) q$$

(Meyers, 1966, pp. 334-335).

Hypotheses 2, 3, 4, & 5

To further analyze the data comparisons between the difference scores and the study's co-variables--personality, age, years of teaching experience, and social origin--were made by means of Pearson's product-moment coefficient of correlation.

Statistical correlation refers to the average amount of relationship between two variables that can be quantified. The situation in which statistical correlation is applicable is always one in which there is a pair of measures for each subject, as is the case in this study, or one set of data for related subjects (Tate, 1965).

The most widely used and best measure of correlation is the product-moment coefficient, developed by the English statistician Karl Pearson, about 1900 (Tate, 1965, p. 129).

Pearson's product-moment coefficient of correlation, designated by r_{xy}

between variables independent of size of the sample and the units of measurement, can be determined by dividing the mean product of the paired deviation scores by the standard deviations of the scores (Tate, 1965, p. 134).

This procedure is summarized as follows:

$$r_{xy} = \frac{\sum xy}{N G_x G_y}$$

Since

$$G_x = \sqrt{\frac{x^2}{N}}$$

$$G_y = \sqrt{\frac{y^2}{N}}$$

the basic formula may also be expressed as:

$$r_{xy} = \frac{xy}{\sqrt{(\sum x^2)(\sum y^2)}}$$

(Tate, 1965, p. 134).

The value of r_{xy} varies between zero, for no correlation, and one, for perfect correlation. A positive or negative sign may be attached to r to indicate the existence of a positive or negative linear relationship (Parl, 1967). The larger the $|r|$, the stronger the relationship.

The assumptions underlying r_{xy} are as follows:

(Tate, 1965)

- 1) rectrolinear regression
- 2) normality of distribution
- 3) homoscedasticity
- 4) continuous data.

Hypothesis 6

Finally, difference scores from a companion study, (Weiss, 1974), were utilized to determine, using r_{xy} , if a relationship between change in cognitive questioning behavior and change in values-clarifying questioning behavior

existed for each treatment level.

The level of significance at which all hypotheses were tested was 0.05.

Summary

The inservice workshop approaches in this study were defined in terms of:

1. actual inservice methodologies as practiced by suburban administrators
2. the recommendations of experts in the field of inservice education.

The thirty subjects in this study were randomly selected from sixty-eight suburban elementary school teachers, who volunteered to participate in an education research project.

The instruments used to assess the personality characteristics of the subjects were the Myers-Briggs Type Indicator and the Heslin-Blake Total Involvement Inventory.

A questionnaire, designed and field-tested by the experimenter, was utilized to collect information on the age, years of teaching experience, and the social origin of the subjects.

Two tapings, pre-inservice workshop/post-inservice workshop, were made of the subjects' verbal classroom behavior. Each tape was analyzed for the number of values-clarifying questions expressed by the subject.

Single classification analysis of variance, Tukey's

post-hoc comparisons, and Pearson's product-moment coefficient of correlation, were used to analyze the data. These statistical models were chosen because the assumptions underlying their use were met and they were representative of powerful and effective statistical tools.

The hypotheses were tested and the analysis of the results is discussed in the following chapter.

CHAPTER IV

RESULTS OF THE STUDY

The data generated by the study were analyzed according to the procedures described in Chapter III. The findings of those analyses are presented in the same order as described.

Rater Reliability

As described in Chapter III, the raters were trained to identify values-clarifying questions by the experimenter using tapes made by the teachers in the pilot district.

To establish reliability between the raters, Kendall's Coefficient of Concordance was applied to the results obtained by the raters and the trainer, from the same fifteen-minute tape segments. The raw data and the rankings are presented in Appendix G. The coordination of this study with a companion study focusing on cognitive questioning (Weiss, 1974) made it necessary to train the raters to identify various kinds and levels of questions. The category chosen to be ranked as representative of the raters training was the total number of questions asked by the teachers.

TABLE 6

Ranking of Tapes by Raters

Tape No.	Rankings			Trainer	Sum of Ranks
	Rater A	Rater B	Rater C		
1	4	4.5	3.5	2	14.0
2	4	4.5	3.5	3.5	16.5
3	8	7	8.5	10	33.5
4	10	9.5	10	8.5	38.0
5	6	6	6.5	6	24.5
6	4	2.5	3.5	5	15.0
7	8	9.5	8.5	7	33.0
8	1	1	1	1	4.0
9	8	8	6.5	8.5	31.0
10	2	2.5	3.5	3.5	11.5

By applying these figures to Kendall's formula, the coefficient of concordance (W) was determined.

$$W = 0.9227$$

The coefficient of concordance established the rater reliability as highly acceptable.

Once the rater reliability was established, analysis of the experimental data (Appendix H) was done. The data presented in Appendix H included both the information gathered for this study and that of the companion study (Weiss, 1974). This was necessitated by Hypothesis 6 which sought to determine if a relationship existed between change in values-clarifying questions and change in cognitive questions, as a result of the workshop approaches. Coordination of the data collection for both studies also reduced the number of chores required of the subjects.

The data collected from the subjects and from their pre and post-treatment tapes were coded and transferred

to punched cards for the remaining statistical analyses. These were done at the Loyola University computer center on the I.B.M. 360-65 computer. An ANOVA design from the Bio-Med package developed at the University of California at Los Angeles, and revised in January, 1972, was used. The findings were as follows:

Hypothesis 1

There is no significant difference between Workshop Approaches A, B or C and the number of values-clarifying questions asked by the subjects.

This hypothesis was accepted since the F-ratio of 2.8610 was below the critical value of 3.5. However, it was significant above the 0.10 level.

TABLE 7

Analysis of Variance for Values-Clarifying Questions

<u>Treatment Group</u>	<u>A</u>	<u>B</u>	<u>C</u>
Sample Size	10	10	10
Mean	0.8000	2.2000	0.5000
Standard Deviation	1.3984	1.8135	1.8409
<u>Sum of Squares</u>	<u>D.F.</u>	<u>Mean Squares</u>	<u>F-Ratio</u>
Between Groups	16.4666	2	8.2333
			2.8610*
Within Groups	<u>77.6999</u>	<u>27</u>	<u>2.8778</u>
Total	94.1666	29	

*p 0.10.. Not significant at 0.05 level

Hypotheses 2, 3, 4, 5, 6

Using components of the same computer program and the same coded punched cards, a correlation matrix was completed for the remaining variables. The Anedecor's Table (Rahlf & Sokal, 1969) was consulted to determine the value at which the correlation coefficient would be significant for an N of thirty and 0.05 level of significance. This was found to be 0.35 and the remaining hypotheses were evaluated at this value.

Hypothesis 2

There is no significant relationship between the frequency of values-clarifying questions asked and selected personality factors of the subjects.

1. Heslin-Blake Total Involvement Inventory. The data obtained from the inventory generated scores in three categories and a total involvement score (Appendix H). The correlations were computed separately for each category since this would yield information more meaningful than a correlation with the total score alone.

The affective scores of the subjects had a standard deviation of 14.6719 derived from a mean score of 100.8999. The mean score indicated that the subjects displayed generally less affective involvement than the test norming group whose mean was 116.0.

The correlation coefficient for frequency of values-clarifying questions expressed as related to the affective

score was -0.199 . This was below the established critical value of 0.35 .

The behavioral scores of the subjects had a standard deviation of 14.6423 derived from a mean of 88.5000 . This mean was below the test mean of 100.0 on this scale. The coefficient of correlation for the frequency of values-clarifying questions expressed with the behavioral score was 9.245 , which was not significant.

The cognitive score of the subjects had a standard deviation of 13.5562 derived from a mean of 79.5666 and was also below the test mean of 86.0 for this scale. The correlation coefficient for the frequency of values-clarifying questions expressed and the cognitive scores of the subjects was -0.026 , which was also below the critical value established for significance. The subjects' means for all scales were below the means established for the test by the norming group. Their total scores were also well below the established mean of 300 , indicating that they are people who are over-all, relatively uninvolved in terms of the traits measured by the test.

TABLE 8

Summary of Heslin-Blake Total
Involvement Inventory Results

<u>Scale</u>	<u>Test Mean</u>	<u>Subjects' Mean</u>	<u>Subjects' Standard Deviation</u>	<u>Correlation Coefficient</u>
Affective	116	100.8999	14.6719	$-0.199(n.s.)$
Behavioral	100	88.5000	14.6423	$0.245(n.s.)$
Cognitive	86	79.5666	13.5562	$-0.026(n.s.)$

2. Myers-Briggs Type Indicator. The test generated scores in four categories:

Extrovert-Introvert (EI)
Sensing-Intuition (SN)
Thinking-Feeling (TF)
Judgment-Perception (JP)

For computer coding, the E scores were considered positive (+) and the I scores negative (-) on the EI scale; the S scores were positive and the N scores negative on the SN scale; the T scores were positive and the F scores negative on the TF scale; and the J scores were positive and the P scores negative on the JP scale. The correlation with the frequency of values-clarifying questions expressed, are not to be interpreted as either positive or negative as such, but rather as indicative of the side of the scale represented.

The correlation coefficients for each of the scales in relation to change in values-clarifying questions expressed were as follows:

EI	(-)	0.240
SN		0.093
TF		0.204
JP		0.003

None of these correlations were significant, nor were any of the correlations for the Heslin-Blake scales significant. Therefore, Hypothesis 2 was accepted.

Hypothesis 3

There is no significant relationship between the frequency of values-clarifying questions asked and

the age of the subject.

The mean age of the subjects was 37.3999 with a standard deviation of 11.5567. The correlation coefficient for this category was 0.006. This was not significant, and Hypothesis 3 was accepted.

Hypothesis 4

There is no significant relationship between the frequency of values-clarifying questions asked and the years of teaching experience of the subjects.

The mean number of years of teaching experience was 12.2333 with a standard deviation of 9.3502. The correlation coefficient of 0.092 indicated no significant relationship existed and Hypothesis 4 was accepted.

Hypothesis 5

There is no significant relationship between the frequency of values-clarifying questions asked and the social origin of the subjects.

The social origin data was originally expressed in terms of social class, with L (lower), UL (upper-lower), LM (lower-middle), M (middle), UM (upper-middle), and U (upper). For computer coding, these were converted numerically as follows: 1-lower, 2-upper-lower, 3-lower-middle, 4-middle, 5-upper-middle, and 6-upper.

The mean for the social origin of the subjects was 3.4 with a standard deviation of 0.9321. This reflects the homogeneity of the group in this category, as compared

to much wider variations in the other categories.

The correlation coefficient for values-clarifying questions expressed and social origin was 0.219. This was not significant and lead to the acceptance of Hypothesis 5.

TABLE 9

Summary Data for Hypotheses 3, 4, 5

<u>Hypothesis</u>	<u>Group Mean</u>	<u>Standard Deviation</u>	<u>Correlation Coefficient</u>
3(age)	37.3999	11.5567	0.006(n.s.)
4(experience)	12.2333	9.3502	0.092(n.s.)
5(social origin)	3.4	0.9321	0.219(n.s.)

Hypothesis 6

There is no significant relationship between change in frequency of values-clarifying questions asked and the frequency of higher level cognitive questions asked by the subjects.

This hypothesis necessitated the inclusion of data from the companion study (Weiss, 1974), which focused on one-exposure inservice workshops based on cognitive questioning. The data for the Weiss study were generated from the same subjects, instruments, approaches and tapes, thus permitting a comparison to be made between the studies.

The correlation between change in values-clarifying questioning and higher level cognitive questioning was 0.061. This was not significant and Hypothesis 6 was, therefore, accepted.

In addition to the empirical data that was analyzed,

the worksheets (Appendices C and D) were examined. These could not be included in the statistical analyses because they were completed by the total workshop population (subject and non-subjects). The pre-existing condition of anonymity precluded identification of the study's subjects. The worksheets were used as instructional devices during the one-exposure inservice workshops. The analysis of these worksheets for both approaches (A/B) indicated that all but four participants could describe values-clarifying questions and differentiate them from other types of questions. In addition, the Workshop B participants demonstrated the ability to compose values-clarifying questions based on various stimuli (e.g. pictures and textbooks).

A workshop evaluation form which asked the questions listed below:

1. Which session did you attend?
2. Did you enjoy the sessions?
3. Do you plan to use some of the ideas shared in your classrooms?
4. Comments.

was also examined. Almost all the responses were affirmative, indicating that the participants had responded favorably to the experience and felt they would apply the workshop's content in their classrooms. This was unexpected since the ANOVA had shown that they had not incorporated their learnings into their classroom activities at a significant level.

Summary of the Findings

Of the six hypotheses tested, none were rejected. Significance was below the 0.05 level for each of them. The F-ratio of 2.86 for Hypothesis 1, was significant at more than 0.10. This indicated a trend that the experimental group produced most change as compared to the other groups.

The implications of these findings and recommendations for further research are discussed in the next chapter.

CHAPTER V

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

The goal of this study was to conduct an exploration of alternate approaches to one-exposure inservice workshops, which would increase or establish the subjects' use of values-clarifying questions in the classroom. A representative sample of elementary school teachers from a suburban community was selected. These teachers were divided into traditional (Workshop Approach A), experimental (Workshop Approach B), and control (Workshop Approach C), groups. The traditional group teachers participated in a one-exposure inservice workshop, which utilized an approach based on procedures used by suburban administrators in planning inservice activities. The control group teachers attended one-exposure inservice workshops based on topics not related to values-clarifying questions. The experimental teachers participated in a one-exposure inservice workshop based on an experimental methodology. The elements of this methodology were synthesized from the recommendations of experts in the field of inservice education.

Since the major objective of the one-exposure inservice workshop was to increase or establish the subjects' use of values-clarifying questions, it was presumed that certain differences in the frequency of values-clarifying questions

expressed would be noted in the subjects' classrooms. In addition, it was anticipated that these differences could be accounted for in terms of the biographical variables of the study and the integration of cognitive questions with values-clarifying questions. Hypotheses were formulated to test these ideas.

Data were gathered on significant personal teacher characteristics as identified through a review of the literature. The Myers-Briggs Type Indicator and the Heslin-Blake Total Involvement Inventory were utilized to collect personality data. A questionnaire was designed to collect data on age, years of teaching experience, and the social origin of the subjects. The final data were obtained by trained raters listening to pre- and post-treatment tape recordings made by the subjects and counting the number of values-clarifying questions expressed. The hypotheses were accepted on the basis of the statistical tests applied.

In addition, data were gathered from a workshop evaluation form and worksheets to note the over-all effect of the one-exposure inservice workshop. The total workshop population, which included both subjects and non-subjects, completed these forms and since there was no feasible way to identify the subjects of this study without biasing the data, these forms could not be subjected to statistical analysis.

Conclusions of the Study

The following conclusions were drawn from the acceptance of the first null hypothesis:

1. As a result of the evidence gathered and analyzed, it was concluded that neither Workshop Approach A, nor Workshop Approach B was effective in promoting change in the subjects' use of values-clarifying questions in their classrooms.
2. It was also concluded that the type of approach (A/B) used in a one-exposure inservice workshop, was not a significant factor in effecting change in the subjects' use of values-clarifying questions.
3. The data did show that the experimental group (Workshop Approach B) produced more change when compared to the other groups, however, the change produced was not significant. This trend was reinforced by the data of the companion study (Weiss, 1974). The Weiss study indicated significance at the 0.05 level for Workshop Approach B. Therefore, it may be concluded that an individual exposed to Workshop Approach B, was somewhat more likely to utilize values-clarifying questions than individual exposed to Workshop Approach A.

The following conclusions were drawn from the acceptance of the second, third, fourth and fifth null hypotheses:

1. The data did not indicate a significant relation-

ship between the frequency of values-clarifying questions expressed and selected personality factors of the subjects.

2. The data did not indicate a significant relationship between the frequency of values-clarifying questions expressed and the age of the subjects.
3. The data did not indicate a significant relationship between the frequency of values-clarifying questions expressed and the years of teaching experience of the subjects.
4. The data did not indicate a significant relationship between the frequency of values-clarifying questions expressed and the social origin of the subjects.

With respect to the acceptance of the sixth null hypothesis, it was concluded that the data failed to indicate a significant relationship between change in the frequency of values clarifying questions expressed and change in the frequency of higher level cognitive questions expressed by the subjects.

Implications related to the hypotheses, but which could not clearly be supported by the collected data, are presented in the following section. The discussion of these implications is directed at refining them through future research.

Implications of the Study

The data have indicated that the type of approach (A/B) to a one-exposure inservice workshop was not a significant factor in effecting change in the subjects' values-clarifying questioning behavior. The question that naturally arises then is what are the factors which would result in significant change?

It may be hypothesized that the frequency of exposure to the values-clarification process is a major factor in effecting change in a teacher's ability to utilize values-clarifying questions in the classroom. This speculation appears valid for the following reasons. It is proposed that before a teacher can assist the learner in clarifying his values, the teacher must first experience identification and clarification of his own value positions. This inward analysis of one's own value system seems to demand a number of prerequisites. Among these are:

1. An opportunity to explore value issues
2. An opportunity to examine alternative value positions and their consequences
3. An opportunity to accept, reject, or modify one's value positions as a result of this examination
4. An opportunity for introspective reflection
5. An opportunity to internalize and practice the values-clarification process and behaviors which

include: the development of listening skills, the ability to be non-judgmental, the acceptance of others as individuals possessing dignity and worth via the fostering of psychological safety, authenticity and empathetic understanding.

All these require time. It is, therefore, suggested that before the teacher can begin to assist the learner in clarifying his values, the teacher must be afforded the necessary time to identify and clarify his own value positions. This implies a series of inservice workshops, inasmuch as one-exposure workshops are not conducive to this type of development, as indicated by the lack of significant results. In order for the teacher to learn how to utilize values-clarifying questions in his classroom, additional inservice exposure to the values clarification process seems to be needed.

Other factors (e.g. choice of workshop approach and the subjects themselves) also may have lead to the acceptance of all null hypotheses. The review of the literature established that historically schools direct their efforts toward the learner's cognitive development at the expense of his affective development. The resultant product is what Lyon (1971) termed the "intellectual half-man". Furthermore, the review of the literature indicated that teacher education programs have been inadequate in training teachers for facilitating cognitive development, and nonexistent for

the preparation of teachers to facilitate affective development. Hence there is need for inservice programs. These statements imply that the subjects involved in this study can be categorized as "intellectual half-men", because they were products of schools which failed to provide prior explicit development and training along the affective plane.

This statement is further substantiated by the subjects' scores on the personality instruments. The subjects scored below group norms on all the scales of the Heslin-Blake Test, which is indicative of a lack of involvement. This was especially significant in terms of the A scale, which measured affective or feeling involvement with people. Low scorers on this scale were described (Chapter III) as affectively passive, emotionally controlled and interpersonally cautious. In terms of the Myers-Briggs Test, the subjects were characterized as thinking types as opposed to feeling types. A thinking type, as described by this instrument, is relatively unemotional and uninterested in people's feelings. The subjects over-all were not affectively developed or feeling orientated.

In addition, an advanced Workshop Approach B, emphasizing the implementation of an affective technique (the values-clarifying question) was utilized without prior consideration of the subjects' affective development. The lack of significance of the personality data implies then that (1) subjects must be developed along the

affective dimension before Workshop Approach B can be effectively utilized and (2) the initial choice of a one-exposure inservice workshop was inadequate for obtaining the desired results with these subjects.

This was further illustrated by the fact that the workshop participants were able to assimilate the concepts presented along a cognitive dimension, as verified by the worksheets, but were unable to transfer this learning over to the affective dimension and successfully implement it in their classrooms. While the experimental methodology (Workshop Approach B) was effective in promulgating change in the subjects' cognitive questioning behavior (Weiss, 1974), it was not effective in bringing about change in the subjects' values-clarifying questioning behavior. This finding implies the following:

1. A methodology which successfully develops cognitive growth may not be successful in developing affective growth.
2. While one-exposure workshops may be effective in promulgating change when the subjects have a previously held concept, such as cognitive questions, refined, they do not seem to be an effective vehicle for the introduction of a new concept, such as the values-clarifying question.
4. In encouraging affective growth, a one-exposure

workshop utilizing a dominately cognitive approach (i.e., if I teach you enough values-clarifying questions, you will incorporate them into your teaching repertoire) is not a reliable learning approach for affective growth.

4. New approaches may need to be developed in order to facilitate affective growth.

It seems that an effective inservice workshop approach on values-clarifying questions, must first build in and develop the subjects' affective dimension before cognitive application of that dimension is possible. Such an approach is highly unlikely within the parameters of an one-exposure inservice workshop as the collective lack of significance of the data suggests.

Finally, the experimental (B), as well as the traditional (A) methodologies utilized a group approach to learning. A value, as defined in this study, grows out of one's life experiences. Different individuals have different life experiences and hence different values. The values clarification process stresses the uniqueness of the individual. There existed dramatic variation along the individual dimension within groups with the exception of social origin. Inasmuch as a group approach was utilized in the study, the possibility exists that this focus on group might have obscured some very significant changes in the individuals. The collective lack of significance of the data

implies a need to focus analytically on the individual, as well as on the group.

Humanistic Education, of which the values-clarifying question is an integral part, defines teaching as a psychological relationship, a helping, interpersonal relationship. Effective use of the values-clarifying question is contingent on the establishment of interpersonal relationships. The personality data indicated that the subjects were interpersonally cautious. The lack of significance of the other biographical data further implies that age and years of teaching experience do not have a direct bearing on one's ability to establish an interpersonal relationship. Nor does it appear likely that the establishment of an interpersonal relationship is a matter of learning the proper techniques, such as how to ask a values-clarifying question. Rather, it seems to be a question of personal value identification and integration as Patterson (1973, pp. 126-127) states:

Interpersonal relations are not a matter of techniques. Humanistic teaching, therefore, cannot be reduced to a bag of tricks or techniques. This is the error of those writers whose educational backgrounds have imprinted on them the importance of methods. In the effort to be objective, concrete, specific, and practical they have focused on developing lists of activities, procedures, projects, devices, etc. for the teacher to use. These are often not much more than tricks or gimmicks to initiate and give content to an interaction. To some extent, perhaps, this is necessary for teachers who have been so content oriented, so lesson-plan dependent, that they are unable to enter a relationship spontaneously, without an agenda, but to the

extent that they are and continue to be dependent on such crutches they will be prevented from becoming free to enter and establish a spontaneous relationship.

It is true that some writers (e.g. Brown, 1971) present evidence to support the effectiveness of such an approach. But they fail to realize that the success is probably more dependent upon the effectiveness of the teachers as persons--their interest, concern, enthusiasm--than upon the methods or techniques per se.

One cannot really tell another how to express his caring or his love. Each of us must find his own way of doing it--his own style of implementing his attitudes and beliefs, his own way of giving himself. In a basic sense one's self is the instrument of teaching, as of all human relationships and one must learn to use one's self as an instrument for facilitating the development of others. The individual can be assisted in doing this, but he must do it himself.

It stands to reason that one of the ways teachers may be assisted in doing this is through inservice workshops. Perhaps the collective lack of significance of the data implies that the best a one-exposure workshop can do, is to initiate the participants' process of self-discovery. The workshop participants indicated that they planned to use values-clarifying questions in their classrooms. Yet analysis of the data showed that they did not. Perhaps they were unable to, for as St. Thomas Aquinas so succinctly stated, "Nemo dat quod non habet"; "You cannot give what you do not have."

Recommendations

It seems that this researcher's lament, "If I only

knew then what I know now!" is most appropriate here. Yet it is probably this kind of hindsight that provides other researchers with insights, resulting in additional explorations and expansions of knowledge. It is with this in mind, that the following recommendations for future research are made.

In general, future explorations into the relationships that may exist between an inservice workshop presentation based on an affective dimension and the actual classroom implementation of that presentation are necessary. These explorations should include the following:

1. Identifying viable approaches to one-exposure inservice workshops focused on affect, which would effect growth in that area.
2. Determining if there exists a relationship between the teachers' affective development and their ability to utilize/implement affective concepts. Does an individual's cognitive development interfere in his ability to develop his affective component? Is it easier to facilitate affective growth with individuals who have not as yet become, or who have chosen not to become, cognitively educated? (Students and non-college oriented people).
3. Retesting Workshop Approach B with subjects who are developed along the affective plane. Would

a one-exposure workshop based on the implementation of an affective concept be effective with subjects who are affectively developed?

4. Determining if a time factor is essential to the achievement of affective growth, through comparison of one-exposure workshops with longer term and/or a series of workshops.
5. Identifying if a time lapse exists between the internalization of an affective concept and its classroom implementation. Is it the same for all teachers? If not, why not?
6. Identifying and developing instruments which measure affective dimensions.
7. Identifying and comparing environments conducive to affective growth. Can affective growth be centered in the school environment?
8. Synthesizing contributions from other disciplines (e.g. Third Force Psychology, Pastoral Theology) toward this same goal for possible applicability.
9. Examining the consultant's personality and behavior to determine its effect on the learnings of workshop participants. Can a consultant, who is a feeling type, effectively facilitate growth in thinking type participants, and vice-versa?

Basically, it is necessary to find a way to teach someone how to feel!

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APPENDIX A

SUMMARY OF VALUE CLARIFICATION THEORY
(SMITH, 1973, pp. 204-208)

SMITH'S (1973) SUMMARY OF VALUE CLARIFICATION THEORY

The goal of value clarification (VC) is simply to help a person to discover through inductive group process what his values are by structuring exercises that confront his thinking. VC is a methodology and not a philosophy of life. As a methodology, VC does not establish a person's values nor does it study intrinsic values as a philosopher or as a moralist would. It is not the purpose of VC to tell a person what his values should be; rather VC helps him to discover the values by which he is actually living...

It is upon the major concepts or real value, primary values, value indicators, and priority ranking that the exercises and instruments of VC are created. The participants in a VC group do not necessarily need to know the theory behind the intervention. VC uses an inductive group process or, if you prefer, an experiential-learning approach. The participants learn the theory of VC as they are actually working out their values in the group through the exercises and instruments. The participants are encouraged to share with their group as much of their values as they feel comfortable in doing. No one is forced to share any more than he wants to...

The VC definition of value is a totally operational description. On the basis of this definition, many exercises can be devised to help a person discover what his values are and to free him to choose freely from alternatives. He repeatedly acts upon his choices and is willing to acknowledge these choices as his values publicly. This process gives him pleasure because it accomplishes his development as a person. In order for something to be a value it must fulfill the following criteria:

It must be chosen freely.

It must be chosen from alternatives.

The effects of the various alternatives must be considered.

It must be acted upon by the person.

It must be acted on repeatedly.

It must help the person achieve his potential.

It must be publicly affirmed by the person.

A full value must have all seven criteria. If even one of the criteria is missing, it is not a full value but only a partial value or a value that is being formed by the person. Partial values include desires, thoughts not acted on, opinions, interests, aspirations, beliefs, attitudes, etc.

The above can be summarized into three general areas: Choosing, acting, prizing. To be a full value something must be consciously considered and deliberately chosen. We have many so called "values" that have been introjected from parents and schooling which are not full values of our own (even though we act on them) simply because the person never consciously chose them. Secondly, we frequently think that we have a high value in some area when in actuality it is nothing more than a strong opinion and so it is not a full value. A full value must be acted upon repeatedly. Thirdly, we must prize a value. There are many things that we do in our society that do not help us to grow in the talents that we want to develop or things that we are forced to do but do not enjoy doing nor care to share with others. A full value is something we enjoy because we see how it is helping us to develop as a person, and we wish to share and affirm it publicly to others.

A value facilitator does not necessarily have to give the above definition to a group. The exercises and instruments used in value clarification gradually teach a person what his values are, just as with other group dynamic approaches, the group does not have to know the theory behind groups in order to develop cohesiveness. In value clarification the people discover what their true values are as the various instruments confront them by examining what their values are.

One of the major concepts in VC theory is that of primary values. VC is a methodology, and the facilitator's responsibility is to create the opportunity for people to discover their own values, not to impose his values on them. The goal is to make people aware of what their value indicators demonstrate as their full or partial values according to the criteria. One of the criteria is that the value facilitates the growth of the person and helps him develop his potential. Modern developmental psychology seems to indicate that there are two primary values that most would accept: the value of one's own self-worth and the value of the self-worth of others. Different philosophical or religious stances may emphasize a particular aspect within these two broad primary values, but this concept should not be carried so far as to impose values.

Another important concept of VC is that of value indicators. A value indicator is simply something which is not a full

value. In other words, it does not meet all seven criteria outlined above. However, value indicators are important because they show a person what values he is in the process of forming. He may have a goal but not be working toward it and so it would not be a full value. He may have an attitude that he absorbed from his parents but which he did not choose. He may say he has an interest in something but never takes the time to act on the interest. Feelings, beliefs, and aspirations are usually value indicators because they do not fulfill all seven criteria of a full value.

The way we use our time and money are very strong value indicators. A person may say that he has as a high value the importance of reading and keeping up in his thinking. However, you might ask him how much time does he take to read each week or when he last read a good book and be surprised to discover that the last time he read a book was five years ago. A simple process in determining a value is to ask a person or a company to describe how they spend their money. Generally speaking, the more money they spend on something, the greater the value it is to them.

Priority ranking is another important concept in VC theory. This is the process whereby the individual takes inventory of his full and partial values, examines them and puts them in the order of their importance to him. Many of the instruments in VC are geared to help a person rank his values and become aware of what his priorities truly are. Since many people have not reflected on the values they live by, most of the rankings will be dealing with priorities, which are partial values. In VC, people are confronted with their hierarchy of priorities. In the process of identifying and ordering their priorities, individuals come to know themselves better and how they relate to the world in which they live. It is this process of reflection and ranking that helps the person grow in self-awareness as a person with a choice about his destiny.

The emphasis in the ranking of one's priorities is not whether the person is right or wrong or has good or bad values. Rather, the process is designed to help the person become aware of what his values and priorities are. Once aware, he is free to choose his values and priorities. Being aware of what one's full values are gives the person the freedom to choose the values that help him grow and to choose the priorities that achieve the ends he desires.

One of the discoveries of VC is that two people may have the same priorities and yet rank them differently. The difference in ranking is the source of conflict between the two people. The use of the VC approach to priority

ranking can be used as a way of resolving conflicts. Once individuals see how their different rankings cause conflicts they can negotiate out their differences and resolve the conflict in such a way that both people will "win".

In conclusion the VC approach is a methodology that helps the participant discover his actual values and facilitates him to freely choose the value that will help him grow in the direction he wants. (Smith, 1973, pp. 204-208).

APPENDIX B

THE DISTRICT'S NEEDS
IN TERMS OF THE VALUES-CLARIFYING QUESTION

THE DISTRICT'S NEEDS

Nomothetic Needs

1. What is the value of such questions?
2. How do you ask these questions?
3. Do you bring feelings and values into the question itself?
4. Do you ask the child things that interest him in asking these questions?
5. How can I ask questions that allow the child to think about himself?
6. How can these questions be used?
7. Are certain areas more conducive to values-clarifying questions?
8. How can they fit into subjects such as math?
9. Is there a guide or outline to types of areas to be explored?
10. What is a good situation to introduce these questions?
11. When do you ask these questions?
12. How can the teacher ask questions that are related to the subject matter and point out that each child's answer is right?
13. How does the teacher guide discussions based on such open-ended questions?
14. How do value questions come out of what they've learned?
15. What are classroom uses for these questions?
16. How can you teach children to express their values in a logical, rational manner?
17. What are some ways of developing the child's evaluative and judging abilities?
18. How do I constantly remember to come up with such questions?

19. How do I go about helping the child develop his own value system?
20. Are essays a good way for students to develop skills in expressing themselves effectively?
21. Are the children actively involved in the learning situation?
22. How do I begin with the students? Do I ask every student a values question?
23. How do I get them to respond?
24. Do these questions work better with some children than with others?
25. How do I get my class more student-oriented?
26. Can these questions help in solving discipline problems?
27. Before you can ask a values question, you must be sure that each kid understands exactly what the issue, like mercy-killing, is; how can you plan so that you can introduce factual material ahead of time to help them understand the issue?
28. How do you achieve a synthesis of factual and affective material?
29. Is it necessary to?
30. Can affective questions take the place of cognitive questions?

Idiographic Needs

1. How do I help a child develop a value system through questions, when I'm not supposed to impose my values on the child?
2. How do I begin to think about areas in life or in textbook situations and really understand them myself?
3. Should I have my own set of values that I try to enforce on my students or should I let them develop their own, even when I know they're wrong?
4. How do I establish a balanced attitude towards recognizing my own values and conformance to prescribed rules?

5. As a person in a classroom, it would be unsatisfactory to never give any personal opinions; however, as a teacher, do I regulate the influence that any such statement may have with respect to student reaction?
6. How do I separate my own values from my teaching?
7. How do we get the children to start believing in themselves as real, live people with respected judgments or ourselves for that matter?
8. Should any of the teachers' values be passed on to the students?
9. Some school districts have their own values; should they?
10. How do I train myself out of the normal responses such as "How wonderful?" that have already made value evaluations?
11. Is it unethical to present, ask about a value which tends to be socially or morally unacceptable?
12. How can I get a student to make the decisions that are not the right ones generally, but are right for him?
13. In upper grades, when a question of an ethical nature arises, how can it be handled, particularly if the teacher feels strongly in one direction?
14. What do I do if I find I simply can't stand one of the children's values?
15. What if the student asks for another point of view?
How do I give it without dominating the student?
16. How do I help the child develop his values system without hurting him or yourself?
17. Can this get carried away?
18. What if it gets too involved?
19. What will provoke thought and discussion yet not cause hurt feelings or emotional scars?
20. How do you avoid a free-for-all when the discussion becomes heated?
21. How do you avoid arguments between students?

22. How does the teacher avoid arguing with the student?
23. How can I learn to use these questions without pushing my own opinions, even though subtly?
24. How do I know when to support the childrens' values?
25. Is it important to keep order, or if the kids get all involved in expressing their feelings, should you let the classroom go to pieces?
26. Will these questions help me understand my students, and the students understand me and each other?
27. Is it important for all of us in the classroom to feel that he belongs? If so, how do you make everyone, teacher included, comfortable?
28. Does sharing of experiences among peers prove to be a better learning experience than being told about it?
29. Does the teacher have to agree with the values being presented by the student?
30. Where does one draw the legal line of teaching values--prayers, pledge of allegiance, etc.?

APPENDIX C

THE DESIGN OF THE WORKSHOP FORMAT

THE WORKSHOP FORMAT

Workshops can vary in a variety of ways--content, approach, number of participants, time, etc. Yet despite the diversity, all workshops share certain common characteristics. Large or small, the workshop must have an appropriate site, a well-defined instructional program, and suitable instructional materials. The planner of even the most modest workshop needs to be aware of the full set of workshop planning tasks. Only then can he intelligently discard the tasks that aren't viable for his particular situation (Ritz, 1970).

This study's workshop was designed in accordance with the guidelines established by the Eastern Regional Institute for Education (ERIE) which in turn were based on the American Association for the Advancement of Science's guide for inservice instruction in science (1967). While the ERIE workshop format is concerned with science, Ritz (1970, p. 12) points out that "...it is not limited to this area, it serves as an excellent strategy for teaching any subject matter." The ERIE workshop design utilized Getzels' (1958) model of change and an overall instructional philosophy of active involvement of workshop participants, as did this study.

According to the ERIE guidelines,

Whatever the actual content of a given workshop, it is recommended that persons responsible for instructional programs make every effort to provide:

1. A maximum of active participant involvement with the content of the program.
2. Exemplary teaching in terms of style.
3. Maximum involvement with the materials of the program.

(Ritz, 1970, p. 28)

In addition, the ERIE guidelines recommend that workshop planners use:

1. Behaviorally stated objectives
2. Audio-visual materials
3. Active participant involvement via handouts of material packets
4. Interaction of participants with the presenter
5. Allowing time for the participants to discuss ideas/solve problems at their places
6. Instructional plans which include the following: title, credits, objectives, rationale, fully described activities in the order of their use, and appraisal techniques.

Instructional Plan

Title

The Values-Clarifying Question

Credits

Raths, L.E., Harmin, M., and Simon, S.B. Values and teaching. Columbus, Ohio: Charles E. Merrill, 1966.

Simon, S.B., Howe, L.W., and Kirschenbaum, H. Values clarification: A handbook of practical strategies for teachers and students. New York: Hart

Publishing Company, 1972.

Harmin, M., Kirschenbaum, H., and Simon, S.B. Clarifying values through subject matter. Minneapolis: Winston Press, 1973.

Pfeiffer, J.W., and Jones, J.E. Structured experiences for human relations training. Vol. I. Iowa City, Iowa: University Associates Press, 1969.

Objectives

General goal: To prepare the participants to incorporate the values-clarifying question into their teaching repertoire.

Specific Instructional Goals: At the end of the workshop, the participants should be able to:

1. Describe a values-clarifying question
2. Differentiate values-clarifying questions from non-values-clarifying questions
3. Compose their own values-clarifying questions using a variety of data sources.

Rationale

Value theory is based upon the conception that human beings can learn to make their own decisions, and to cope with their own life situations. It calls for allowing the individual to make his own decisions and to learn from his own mistakes. Value formation usually involves conflicting demands, a weighing and balancing.

The values-clarifying question is one of the techniques through which a teacher can begin to help a student

clarify his values and thereby begin to make his own decisions.

Values clarification is a methodology and not a philosophy of life. It does not do any of the following:

1. Establish a person's values
2. Study intrinsic values as a philosopher or a moralist would
3. Tell a person what his values should be.

What values clarification does is help the individual discover the values by which he is actually living. It tends to raise issues. It confronts the individual with inconsistencies and gets him to sort out his own values, in his own way and at his own pace.

The values-clarification process is based on experiential learning. It requires the active participation of the learner, for it is the learner who does the clarifying. One of the best ways for a teacher to begin to use this process is by beginning on himself. The purpose of this workshop is to provide the participants with that opportunity.

Activities

(The transparencies and other materials utilized during the various activities have been placed at the end of this section.)

1. Values listing: The consultant will ask the participants to list any five of their values. If anyone asks what do you mean by a value, the

consultant will repeat the direction. After approximately thirty seconds, the consultant will ask is anyone having a problem completing the task? The participants will then be given an opportunity to express their thoughts/feelings. The purpose of this activity is to provide focus. There are many ways to define values. We will be using Rath's definition, which will be given to the participants at this point.

2. The Process of Defining a Value--A Reading:

The participants will be asked to take a few minutes to read this article. The purpose of using this reading is twofold: a) to introduce the participants to the Rath's model, and 2) to provide a common definition of values.

3. Lecturette: The consultant will share with the participants:

- a) The rationale behind the values-clarifying process
- b) Why it is important in terms of the individual
- c) The necessary conditions in order for it to effectively take place
- d) The values-clarifying question as one of the techniques of this process.

Transparencies will be used listing the important

points of a, b, c, and d, during the lecturette. At this point the participants will be told that this process is based on experiential learning and the best way to learn is by doing.

4. Ground Rules: The participants will be told that they do not have to participate in any of the strategies; they always have the option to pass. They will also be asked to practice being non-judgmental.
5. Establishing Psychological Safety or "You're OK as you are right now. If individuals are to feel comfortable with each other, and share their personal feelings, they must be given an opportunity to get to know each other. This is one way of meeting idiographic needs.

- a) Name Tags: The participants will be given a name tag, and asked to write on it the name they want the rest of the group members to call them. (Teachers tell students what they should call them. How many times do teachers ask students their preference?) Any names are acceptable, and if the participant doesn't like his name, he can substitute one that he does like.

- b) Mini-Interview: The participants will

be asked to find someone in the group that they would like to get to know better. Each participant will be given two and one-half minutes to interview his partner. The only questions they cannot ask are those relating to school/teaching. The consultant will call out when it's time to switch roles. After the five minutes are up, the participants will be asked to reflect back upon the types of questions they asked their partners and to share any questions which could be defined as values-clarifying questions with the rest of the group.

The duets will then be asked to form quartets. Each participant will be asked to introduce his partner to the rest of the group. The consultant will then ask if anyone has any thoughts, feelings, comments, observations they would like to share with the rest of the group.

- c) Place-Fruit Introduction: The participants will be asked to form groups of six, choosing individuals they haven't had an opportunity to react with yet.

They will be asked to share:

1. Name
2. Where you are from?
3. Where you wished you were from?
4. What fruit are you most like?

The consultant will ask which of the above are values-clarifying questions.

The consultant will also share variations of this strategy which can be used in the classroom.

6. Values-Voting: Voting provides a simple and rapid means by which the participants can make public their feelings/responses to a variety of values-clarifying questions. The participants will be asked to indicate an affirmative response by raising their hands, a negative one by pointing their thumbs down, and a neutral response by folding their arms. This activity serves a dual purpose:

- a) It provides the consultant with an opportunity to give examples of values-clarifying questions.
- b) It develops the participants realization that others often see issues quite differently than we ourselves do, and legitimizes that important fact.

The voting list includes the following questions; each is prefaced with the statement, "How many of you..."

- a) Think the most qualified person usually wins in school elections?
- b) Think most adults understand young people today?
- c) Think we ought to legalize pot?
- d) Think we should have compulsory school attendance until age 16?
- e) Had a good lunch?
- f) Have a hole in either sock?
- g) Think giving grades in school inhibits meaningful learning?
- h) Think school administrators should be selected from the teaching staff on a rotating basis?
- i) Would like your students to call you by your first name?
- j) Collect savings stamps? Actually paste and trade them in?
- k) Actually enjoy teaching?
- l) Would change your profession if you had a chance?

The consultant will ask if anyone has any thoughts, feelings, comments, observations, he would like

to share with the rest of the group. The consultant will give examples for various grade levels. (see handouts)

7. Listening Triads: The participants will be asked to form triads and label themselves 1, 2, or 3 within their triads. The consultant will give the following instructions:

- a) Each of you will be asked to choose a topic and share your thoughts on it with your group.
- b) Number 1 will begin by choosing his topic from those listed. If you don't like the topics listed, feel free to substitute a values issue of your own.
- c) Before Number 2 can share his feelings on the topic of his choice, he must paraphrase what Number 1 said to the speaker's satisfaction.
- d) Number 3 will paraphrase Number 2, and Number 1 will paraphrase Number 3.

The consultant will then direct the attention of the triads to the overhead projection of the topics. (see transparency) The consultant will ask for a volunteer to paraphrase the task. Upon completion of the activity, the consultant will ask if anyone has any thoughts, feelings, comments, observation, he would like to share with the group.

The purposes of this activity are to a) aid the participants in understanding the necessity of listening to each other with comprehension as opposed to merely hearing words, b) to give them practice in being non-judgmental, and c) to point out the necessity of learning to actively listen when exploring values-clarifying questions. The consultant will also make the following statement: You'll know you're becoming non-judgmental when you can actively listen to someone who has a totally different point of view on a values issue than you do without feeling the need to convert him to your way of thinking.

8. Lecturette: The Three Levels of Subject Matter-- How to Begin. The consultant will identify these as a) the specific level, b) the generalization level, and c) the values level. Using an overhead projection, these levels will be defined and examples will be given utilizing classroom subject matter as data sources in order to show the participants how the values level can be easily added to their own classroom materials.
9. Writing Values-Clarifying Questions: The participants will be asked to group themselves according to the grade levels they teach. They will be asked to do the following on their worksheets:

- a) Define, using their own words, values-clarifying questions.
- b) Write their own values-clarifying questions using topics provided by the consultant.
- c) Share their questions with the other group members.

The worksheets will be collected by the consultant. The participants will be asked to share their thoughts, feelings, comments, observations with the rest of the group.

10. The Public Interview--Closing Activity: The consultant will volunteer to be publicly interviewed by the participants. The ground rules for this strategy are as follows:

- a) The participants may ask the consultant any question about any aspect of his life and values.
- b) If the consultant answers the question, he must answer honestly.
- c) However, the consultant has the option of passing if he doesn't wish to answer a particular question.
- d) The consultant can end the interview at any time by simply saying, "Thank you for the interview."

This activity was chosen to give those participants wishing to do so, a chance to practice asking values-clarifying questions.

11. Whip: If the time permits, depending on how long the interview lasts, the consultant will pose the following question: "What did you learn and/or feel, if anything?" The consultant will then whip around the room calling upon participants to respond. The answer should be brief and to the point. Participants always have the option to pass.

Appraisal Techniques

Evaluation of the workshop experience will be in terms of how well did this workshop accomplish the stated objectives. The participants' worksheets, as well as the responses to an evaluation form which asks: 1) Did you enjoy the session? and 2) Do you plan to use any of the ideas shared in your classroom? will provide the necessary data for evaluation.

In addition, informal evaluation will be based on observations of participant involvement, comments, and the questions asked by the participants.

TRANSPARENCIES
(A.M. AND P.M. SESSIONS)

VALUES

1. GENERAL GUIDES TO BEHAVIOR
2. THOSE ELEMENTS THAT SHOW HOW A PERSON HAS DECIDED TO USE HIS LIFE

VALUES ARE BASED ON THREE PROCESSES

CHOOSING

1. FREELY
2. FROM ALTERNATIVES
3. AFTER THOUGHTFUL CONSIDERATION OF THE CONSEQUENCES OF EACH ALTERNATIVE

PRIZING

4. CHERISHING, BEING HAPPY WITH THE CHOICE
5. WILLING TO AFFIRM THE CHOICE PUBLICLY

ACTING

6. DOING SOMETHING WITH THE CHOICE
7. REPEATEDLY, IN SOME PATTERN OF LIFE

VALUE INDICATORS (PARTIAL VALUES)

1. GOALS OR PURPOSES
2. ASPIRATIONS
3. ATTITUDES
4. INTERESTS
5. FEELINGS
6. BELIEFS AND CONVICTIONS
7. ACTIVITIES
8. WORRIES, PROBLEMS, OBSTACLES

EXPRESSIONS WHICH APPROACH VALUES, BUT WHICH DO NOT MEET ALL THE SEVEN CRITERIA ARE CALLED VALUE INDICATORS OR PARTIAL VALUES.

VALUES

A. GOAL

1. INDIVIDUALS WITH CLEARER VALUES THAT THEY UNDERSTAND, ACCEPT, AND OF WHICH THEY ARE PROUD
2. SKILLS TO CONTINUE TO EVALUATE CHOICES AS THEY GROW AND LEARN.

B. ATTITUDE - THREE STEPS

1. OPEN

- a. STIMULATE A PERSON TO THINK ABOUT VALUE RELATED THINGS
- b. TO SHARE THOSE THOUGHTS WITH US

2. ACCEPT

- a. ACCEPT THOUGHTS OR FEELINGS NON-JUDGMENTALLY
- b. THIS TELLS THE INDIVIDUAL THAT IT IS SAFE TO BE HONEST WITH US AND WITH HIMSELF, NO MATTER HOW CONFUSED OR NEGATIVE HIS THOUGHTS OR FEELINGS MIGHT BE

3. CLARIFY

- a. STIMULATE ADDITIONAL THINKING
- b. so that he may move TOWARD MORE COMPREHENSIVE LEVELS OF VALUING

HARMIN - NEXT

AREAS OF CONFLICT OR CONFUSION

1. DRUGS - HEALTH
2. POLITICS
3. RELIGION
4. WORK - SCHOOL
5. LEISURE
6. LOVE - SEX
7. FAMILY
8. MONEY
9. FRIENDS
10. AGING - DEATH
11. RACE
12. PERSONAL TASTES , CLOTHING STYLES
13. LAWS - WAR

HUMANISTIC EDUCATORS SAY -

1. MAN IS A SENSING, FEELING, THINKING AND ACTING BEING.
2. MAN'S FEELINGS MUST BE INTEGRATED WITH COGNITIVE LEARNING.

GOALS OF HUMANISTIC EDUCATION

1. DEVELOPMENT OF THE SELF

- a. INDIVIDUAL MUST BE PERMITTED TO EXPRESS AND DISCLOSE HIMSELF, SO THAT HE CAN PERCEIVE HIMSELF AS HE IS

- b. INDIVIDUAL MUST BE ABLE TO EXPLORE, LOOK AT, AND EVALUATE HIMSELF. (INCLUDES FEEDBACK FROM OTHERS.)

2. DEVELOPMENT OF AN AWARENESS OF OTHERS.

- a. EXPLORATION IN INTERPERSONAL RELATIONSHIPS

- b. FOSTERING OF GOOD PERSONAL RELATIONSHIPS, CHARACTERIZED BY EMPHATIC UNDERSTANDING, AUTHENTICITY, RESPECT AND WARMTH.

ONE IS FREE TO CHANGE, ONLY
IF HE IS FREE TO REMAIN THE
SAME.

THE ONLY PERSON'S BEHAVIOR YOU
CAN CHANGE, IS YOUR OWN.

BEHAVIORS TO BEGIN FOCUSING ON -

1. ATTENDING BEHAVIORS

- a. LISTENING
- b. NON-VERBAL CUES

2. RESPONDING BEHAVIORS

- a. ACCEPTING (REMAIN NON-JUDGEMENTAL)
- b. ENCOURAGING
- c. CLARIFYING
- d. CHALLENGING - ONLY IF A RELATIONSHIP
HAS BEEN ESTABLISHED

NAME

WHERE YOU'RE FROM

WHERE YOU WISH YOU WERE FROM

WHAT FRUIT YOU'RE MOST LIKE

TOPICS

1. TEACHERS SHOULD BE ALLOWED TO USE CORPORAL PUNISHMENT. YES/NO - WHY?
2. TEACHERS SHOULD BE EVALUATED REGULARLY BY AN OUTSIDE AGENCY, RATHER THAN BY THEIR DISTRICT'S ADMINISTRATORS. YES/NO - WHY?
3. TEACHERS SHOULD ALLOW STUDENTS TO CALL THEM BY THEIR FIRST NAMES. YES/NO - WHY?

DIRECTIONS:

1. EACH PERSON WHO SPEAKS MAY SELECT HIS OWN TOPIC
2. EACH PERSON WHO SPEAKS MUST PARAPHRASE WHAT THE LAST PERSON HAS SAID BEFORE HE HIMSELF SPEAKS.
3. THIS PARAPHRASING MUST BE DONE TO THE SATISFACTION OF THE LAST SPEAKER.

THREE LEVELS OF SUBJECT MATTER

1. SPECIFIC LEVEL -

INCLUDES FACTS, DETAILS, PARTICULARS,
AND THINGS THAT RELATE ONLY TO A
SPECIFIC CIRCUMSTANCE.

2. GENERALIZATION LEVEL -

GENERALIZATIONS ARE BIGGER THAN SPECIFICS
INCLUDES CONCEPTS THAT HAVE EXTENDED
USEFULNESS, THAT HAVE GENERAL TRUTH VALUE

3. VALUES LEVEL

THIS IS THE LEVEL OF SUBJECT MATTER
THAT TOUCHES THE STUDENT'S CHOICES,
HIS PRIDE, OR HIS ACTIONS.

SOCIAL STUDIES

- S.L. - IN WHAT YEAR DID COLUMBUS DISCOVER AMERICA?
- G.L. - WHAT PURPOSES DOES EMIGRATION SERVE TO A TROUBLED SOCIETY?
- V-C L. UNDER WHAT CONDITIONS WOULD YOU FLEE YOUR HOMELAND?

ENGLISH

- S.L. - WHY DID MACBETH KILL DUNCAN?
- G.L. - STATE THE RELATIONSHIPS OF FRUSTRATION TO ACTS OF VIOLENCE
- V-C.L. - HAVE YOU EVER ACTED VIOLENTLY - WHAT CAUSED THE REACTION

SCIENCE

- S.L. WHY DID THE H_2O IN THE EXPERIMENT BOIL?
- G.L. UNDER WHAT CONDITIONS WILL H_2O BOIL?
- V-C.L. WHAT ARE SOME THINGS YOU CAN DO, LIKE WHEN WAITING FOR H_2O TO BOIL, SO THAT IT'S NOT BORING?

HANDOUTS

(A.M. and P.M. Sessions)

Examples of Values-Clarifying Questions

Primary Level

1. Do you like Sesame Street ?
2. Do you wish you could go to bed any time you wanted to ?
3. Do you think school is fun ?
4. Do you think boys should play with dolls ?
5. Do you think girls should play baseball ?
6. Do you think teachers should spank you when your naughty?
7. What makes you cry ?
8. Would you like your Mommy to have a baby ?
9. Are you afraid of the dark ?
10. What's your favorite color ?

Middle Level

1. Do you like your name ?
2. What have you done lately of which your proud ?
3. Do you have a hero ?
4. Do you think your parents are too strict ? Your teachers ?
5. Do you like to go to baseball games ?
6. What is your favorite sport ?
7. What do you like best about school/ Least ?
8. What do you do on rainy days for fun ?
9. If you had a hundred dollars, how would you spend it ?
10. If you could go to Disney Land or camping, which would you choose ?

Upper Level

1. Do you think teachers should be called by their first names ?
2. Do you think that what you're learning in school is worthwhile ?
3. If you were president would you fund the space program?
4. If you saw someone pushing dope, what would you do ?
5. Do you know what you want to be doing ten years from now ?
6. Would you go to school if you didn't have to ?
7. Have you ever used illegal drugs ?
8. Do you think a woman would make a good president ?

THE PROCESS OF DEFINING A VALUE

Persons have experiences; they grow and learn. Out of experiences may come certain general guides to behavior. These guides tend to give direction to life and may be called values. Our values show what we tend to do with our limited time and energy.

Since we see values as growing from a person's experiences, we would expect that different experiences would give rise to different values and that any one person's values would be modified as his experiences accumulate and change. A person in the Antarctic would not be expected to have the same values as a person in Chicago. And a person who has an important change in patterns of experience might be expected to modify his values. Values may not be static if one's relationships to his world are not static. As guides to behavior, values evolve and mature as an individual's experiences evolve and mature.

Values for any one person are not so much hard and fast rules as they are the results of a sufficient amount of hammering out a style of life in a certain set of surroundings. After a sufficient amount of hammering, certain patterns of evaluating and behaving tend to develop. Certain things are treated as right, or desirable, or worthy. These tend to become our values.

Because life is slightly different for all of us, we cannot be certain what experiences any one person will have. We therefore cannot be certain what values, what style of life, would be most suitable for any person. We do however, have some ideas about what processes might be most effective for obtaining values. From this comes what we can call the process of valuing. A look at this process may make clear how we define a value. Unless something satisfies all seven of the criteria noted below, we do not call it a value. In other words, for a value to result, all of the following seven requirements will apply.

1. Choosing freely. If something is in fact to guide one's life whether or not authority is watching, it must be a result of free choice. If there is coercion, the result is not likely to stay with one for long, especially when out of the range of the source of that coercion. Values must be freely selected if they are to be really valued by the individual.
2. Choosing from among alternatives. This definition of values is concerned with things that are chosen by the individual and, obviously, there can be no choice if there are no alternatives from which to choose. It makes no sense, for example, to say that one values eating. One really has no choice in the matter. What one may value is certain types of food or certain forms of eating, but not eating itself. We must all obtain nourishment to exist: there is no room for decision. Only when a choice is possible, when there is more than one alternative from which to choose, do we say a value can result.
3. Choosing after thoughtful consideration of the consequences of each alternative. Impulsive or thoughtless choices do not lead to values as we define them. For something intelligently and meaningfully to guide one's life, it must emerge from a weighing and an understanding. Only when the consequences of each of the alternatives are clearly understood can one make intelligent choices. There is an important cognitive factor here. A value can emerge only with thoughtful consideration of the range of the alternatives and consequences in a choice.
4. Prizing and cherishing. When we value something, it has a positive tone. We prize it, cherish it, esteem it, respect it, hold it dear. We are happy with our values. A choice, even when we have made it freely and thoughtfully, may be a choice we are not happy to make. We may choose to fight in a war, but be sorry circumstances make that choice reasonable. In our definition, values flow from choices that we are glad to make. We prize and cherish the guides to life that we call values.

5. Affirming. When we have chosen something freely, after consideration of the alternatives, and when we are proud of our choice, glad to be associated with it, we are likely to affirm that choice when asked about it. We are willing to publicly affirm our values. We may even be willing to champion them. If we are ashamed of a choice, if we would not make our position known when appropriately asked, we would not be dealing with values but something else.

6. Acting upon choices. Where we have a value, it shows up in aspects of our living. We may do some reading about things we value. We are likely to form friendships or to be in organizations in ways that nourish our values. We may spend money on a choice we value. We budget time or energy for our values. In short, for a value to be present, life itself must be affected. Nothing can be a value that does not, in fact, give direction to actual living. The person who talks about something but never does anything about it is dealing with something other than a value.

7. Repeating. Where something reaches the stage of a value, it is very likely to reappear on a number of occasions in the life of the person who holds it. It shows up in several different situations, at several different times. We would not think of something that appeared once in a life and never again as a value. Values tend to have a persistency, tend to make a pattern in a life.

To review this definition, we see values as based on three processes: choosing, acting, and acting.

CHOOSING: (1) freely
 (2) from alternatives
 (3) after thoughtful consideration of the consequences of each alternative

PRIZING: (4) cherishing, being happy with the choice
 (5) willing to affirm the choice publicly

- ACTING: (6) doing something with the choice
(7) repeatedly, in some pattern of life

Those processes collectively define valuing. Results of the valuing process are called values.

The reader might pause for a moment and apply the seven criteria for a value to one of his hobbies, be it sewing, skiing or hi-fi. Is it prized, freely and thoughtfully chosen from alternatives, acted upon, repeated, and publicly known? If so, one might say that you value that hobby.

From: Raths, Harmin and Simon, Values and Teaching. PP. 27-30.

In addition, each workshop participant received a copy of "A Summary of Value Clarification Theory" (see Appendix A)

APPENDIX D
WORKSHOP OUTLINES

MORNING SESSION--WORKSHOP APPROACH A

For Workshop Approach A (traditional) the consultants had designed their individual presentations as described in the definition of terms in Chapter I. The outline of the morning session was as follows:

1. Opening Activities
 - a. Values listing
 - b. Reading--The process of defining a value
2. Lecturette
 - a. Values rationale
 - b. Definition of values--clarifying questions
 - c. Setting ground rules
3. Ice-breakers (values-clarifying atmosphere)
 - a. Name tags
 - b. Mini-interview
 - c. Place-fruit introduction
4. Examples of the values-clarifying question
 - a. Values voting
 - b. Listening triads
5. Three levels of subject matter
 - a. Specific level
 - b. Generalization level
 - c. Values level
 - d. Some general examples of the above
6. Open interview

7. Worksheet

8. Participant Whip--What did I learn and/or feel, if anything?

In order to keep the content of both workshops constant, the materials used were the same for both sessions. In the morning session, however, no examples for actual classroom implementation were given. Focus was on what values-clarifying questions are, rather than on how they can be used.

AFTERNOON SESSION--WORKSHOP APPROACH B

In order to meet the conditions for the experimental Workshop Approach B, the consultants met to coordinate their instructional plans. It was decided that the content of the session on higher level cognitive questions (Weiss, 1974) and the session on values-clarifying questions could best be coordinated by focusing on the interrelationship of affect and cognition as described in Chapter II. The theme of this session was adopted from the title of Rubin's (1973) book, Facts and Feelings in the Classroom. It was further decided that the workshop presentation would be conducted by both consultants working together in a sequence of activities, and by each responding to and building upon, the ideas presented by the other.

In addition, concrete application of learning, which had been identified as a critical activity through the literature review, was incorporated into this session's activities. Each participant was given the opportunity

to write cognitive questions at each of the Barrett levels (Weiss, 1974) as well as values-clarifying questions, using their own classroom texts as topic sources. This was done to make the question writing practice directly applicable to the participants' ongoing instructional activities and to insure the transfer of learning from the workshop to the classroom. Finally, whenever possible the consultants gave concrete examples for actual classroom use of their particular topics. (See Weiss', (1974) instructional plan for a detained description of the higher level cognitive questioning activities which were coordinated with the values-clarifying activities listed in Appendix C.) The outline of the afternoon session was as follows:

1. Lecturette--Confluent Education
2. Questions in the classroom (definitions)
 - a. Cognitive--facts (Weiss, 1974)
 - b. Values--feelings
3. Establishing psychological safety
 - a. Name-tags
 - b. Mini-interview
 - c. Place-fruit introduction
 - (i) Identification of these question types
 - (ii) How information is used (Weiss, 1974)
4. Barrett Taxonomy (Weiss, 1974)
 - a. Cognitive lecturette and materials
 - b. It's not how much you learned, it's what

you do with it.

5. Values lecturette and rationale
 - a. Values listing
 - b. Values reading
 - c. Listening triads
6. Levels of subject matter
 - a. Classification game (Weiss, 1974)
 - b. Examples of both types of questions from
classroom texts
7. Creating values-clarifying and higher level cognitive questions from
 - a. Picture stimulus
 - b. Classroom textbooks
8. Concluding comments, questions, etc.

This workshop design meets the criteria that had been established:

1. It was concrete, in that application to classroom activities were demonstrated and practiced thereby insuring transfer of learning from workshop to classroom. It dealt with "how to do it" as well as "what to do".
2. Idiographic, as well as the nomothetic needs of the participants were identified and incorporated into the format. This demonstrated the reciprocity of affect and cognition at all learning levels.

3. The coordination of the topics further demonstrated the interrelation of affect and cognition in teaching/learning situations.

ADDITIONAL TRANSPARENCIES

Used Only in Experimental Workshop B, P.M. Session



HUMANISTIC EDUCATORS SAY -

MAN IS A SENSING, FEELING, THINKING,
AND ACTING BEING.

AND THAT

MAN'S FEELINGS MUST BE INTEGRATED
WITH COGNITIVE LEARNING.

CONFLUENT EDUCATION

THE FLOWING TOGETHER OF COGNITIVE
AND AFFECTIVE ELEMENTS IN HUMAN
LEARNING.

RESULTING IN
EDUCATION OF THE TOTAL MAN

QUESTIONS

HIGHER LEVEL COGNITIVE QUESTIONS REQUIRE THE LEARNER TO :

1. ADD INFORMATION FROM HIS OWN BACKGROUND OF FACTS AND FEELINGS TO INFORMATION THAT IS EXPLICITLY STATED IN THE LEARNING EXPERIENCE.
2. MAKE AN EVALUATIVE JUDGEMENT USING EXTERNAL AND/OR INTERNAL CRITERIA
3. RESPOND EMOTIONALLY OR AESTHETICALLY TO THE LEARNING EXPERIENCE.

VALUES-CLARIFYING QUESTIONS

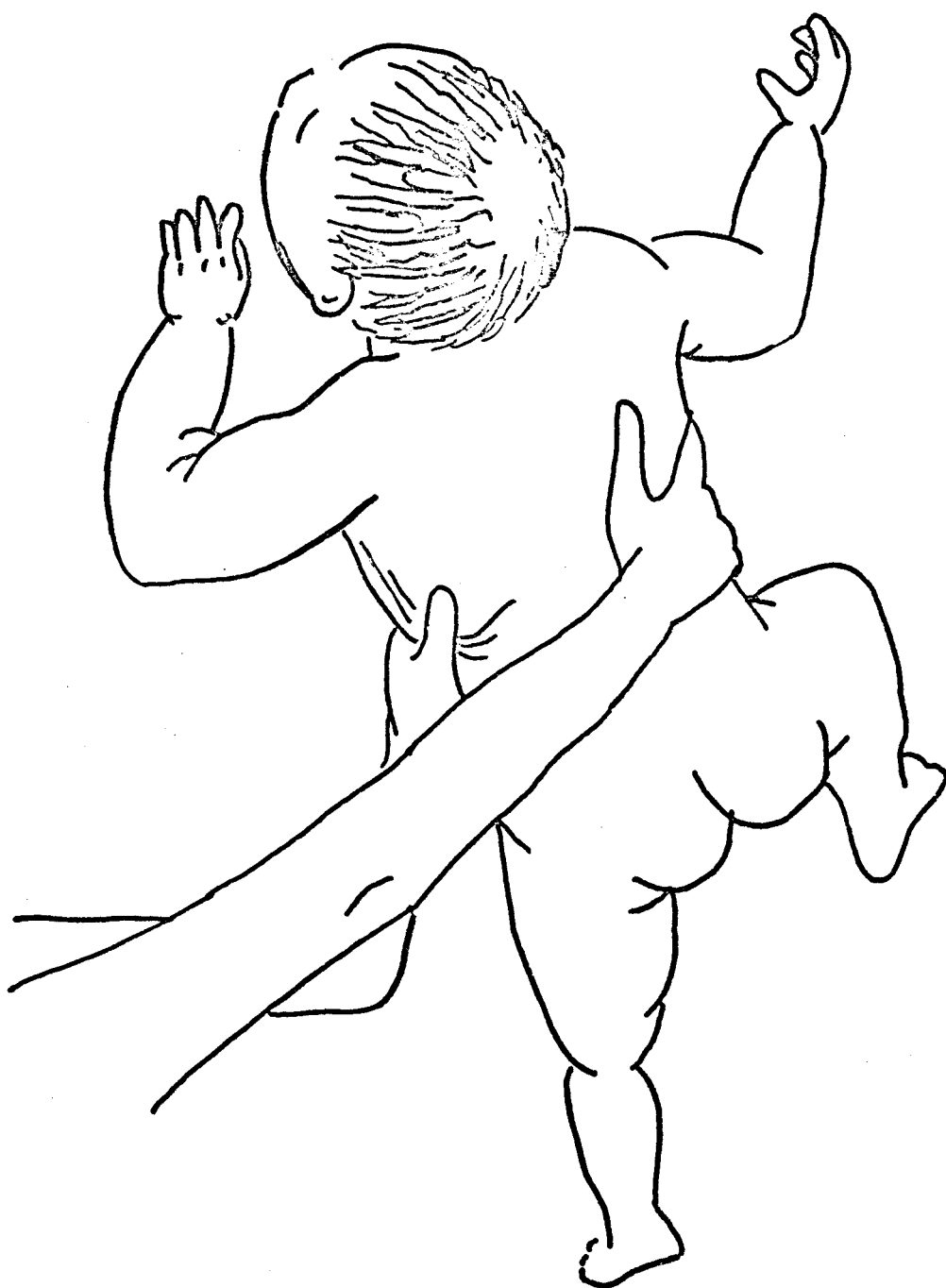
1. ASKS ABOUT A LEARNERS OWN IDEAS, ACTIONS , OR FEELINGS .
2. CONTAIN THE WORD "YOU"
(WHAT DO YOU THINK / LIKE / WANT / FEEL)
3. HAS NO "RIGHT" ANSWER ; ONLY THE LEARNER KNOWS HIS RESPONSE ; EACH LEARNER MAY HAVE A DIFFERENT RESPONSE.

QUESTION LEVELS

BARRETT TAXONOMY	READING METHODS COURSES READING TEXT MANUALS	VALUES
1. Literal a.) Recognition b.) Recall	1. Literal	1. Specific
2. Reorganization		
3. Inferential	2. Inferential	2. General
	3. Assimilative a.) Critical b.) Creative	3. Values
4. Evaluation		
5. Appreciation		

★ CRASH!

Hooooooooonk



HANDOUT

Supplementary Handout used only in the
P.M. Session

Questioning Examples: Primary Level

Reading: Open Highways: Rolling Along; " A New Place for Old Comic Books "
book 1, part 2, p.33.

- Lit.----- Why did mother want Andy and Rose to get rid of their comic books?
- Reorg.---- What has happened so far ?
- Inf.----- What are some of the ways that neatness can help you get along with other people?
- Eval.----- Was Andy's and Rose's mother being fair?
- Appr.----- Did you like or dislike the story ?
- V.-C.----- How many of you left a messy room this morning? Teachers too!
What are some of the messy habits other people have that make you angry?

Social Studies: The Contemporary Social Science Curriculum: Families and Their Needs; " Clothes for the Family " graded1, p.91.

- Lit.----- What are the people wearing ?
- Reorg.---- Which of the following clothes would you wear on a rainy day?
- Inf.----- What's the weather like in this land?
- Eval.----- Why do some people wear more clothes than other people?
- Appr.----- Of all the clothes the author mentioned in the story, which were the most interesting?
- V.-C.----- If you were going to a costume party, what kind of clothes would you pick to go in?

Science; Concepts in Science; " The Eye as the Organ of Sight "
red book, grade 2 , p. 73.

- Lit.----- What does the diagram on page 73 represent?
- Reorg.---- Compare your eyes to the diagram.
- Inf.----- What does light have to do with seeing ?
- Eval.----- Do you think that the color of the eye has anything to do with seeing?
- Appr.----- Why is reflected a good term here ?
- V.-C.----- What would you rather lose if you had to; your eyes ,(sight) your ears, (hearing) or your tongue, (speech) ?

Questioning Examples: Middle Level

Reading: New Basic Readers: More Roads To Follow; " It's a Wolf ",
book 3 , part 2 ; p. 68.

- Lit.----- What caused Penny and Peter to run ?
 Reorg.----- In your own words, tell why they were afraid.
 Inf.----- What is there about some animals, that makes people afraid?
 Eval.----- Could this story have really happened ?
 Appr.----- What part of the story was the most exciting ?
 V.-C.----- Have you ever pretended that you knew something that you really
 did not know ?

Social Studies: The Contemporary Social Science Curriculum; People Use the
 Earth; " Problems of the Cities ", grade 3, p. 171.

- Lit.----- What cities are mentioned in the story ?
 Reorg.----- Using this list, which city had which problem ?
 Inf.----- Compare St. Louis with Mexico City.
 Eval.----- Which of the cities had the worst problems ?
 Appr.----- Which parts of the story were sad ?
 V.-C.----- If you had the power to change our city to make it better,
 what would you change ?

Science; Concepts in Science; " A Drop of Rain ", orange book, grade 4 ,
p. 76.

- Lit.----- In what state is the water from the bottom to the top of the
 chamber? From the top to the bottom?
 Reorg.----- What makes the water move ?
 Inf.----- How can the water droplets be made larger ?
 Eval.----- Based on what we learned from the experiment, are the raindrops
 we see in cartoons and the comic strips accurate ?
 Appr.----- Did you like this experiment ?
 V.-C.----- What are some things you can do on rainy days, so that it's
 not boring ?

Questioning Examples: Upper Level

Reading: Open Highways; " I Swam for 21 Hours ", book 8 , p.35.

- Lit.----- What was Marilyn Bell doing on September 8 ?
 Reorg.----- Divide the story into its three main parts.
 Inf.----- How is practice related to success ?
 Eval.----- What strange ideas did Marilyn have?
 Appr.----- How did you feel about Marilyn?
 V.-C.----- Did you ever quit ? What were the circumstances ?

Social Studies: The Contemporary Social Science Curriculum: Man and Change;
 " How Technology Affects Man ", grade 7, p. 161.

- Lit.----- Using the story, make a list of all the ways technology has
 affected man.
 Reorg.----- Organize the list into main heads and subheads to form an outline.
 Inf.----- What might have happened, if man hadn't moved to cities ?
 Eval.----- Do you think city life has anything to do with pollution? Back-up
 you answer with facts from other sources.
 Appr.----- How did the author cause you to think about pollution ?
 V.-C.----- Of all the electrical appliances you have, which would you be
 willing to give up to conserve energy? Which wouldn't you be
 to give up ?

Science: Concepts in Science: " Code of Heredity ", brown book,
 grade 6 ,p. 326.

- Lit.----- Define heredity.
 Reorg.----- In your own words, what does D.N.A. do ?
 Inf.----- What does looking at a child tell us about his parents ?
 Eval.----- Which ideas about how living things change are still accepted,
 which are no longer believed ?
 Appr.----- Why is "chip off the old block" a good descriptive phrase ?
 V.-C.----- Which of your inherited traits are you most proud of? If you,
 had the power to change some of your inherited traits, which
 ones would you choose to change?

WORKSHEETS--A.M. & P.M. SESSIONS
AND EVALUATION FORM

, A.M. WORKSHEET

1. Using your own words, describe a values-clarifying question.

2. Please indicate with a check, which of the following questions are values-clarifying questions.
 - (1) How many states are there in the U.S. ?
 - (2) What is the English translation of that four line poem ?
 - (3) What is your favorite color ?
 - (4) What conclusions can be justified in the selection read ?
 - (5) Would you rather swim or ski ?
 - (6) What do you think about mercy-killing ?
 - (7) How does a plant get water ?
 - (8) Does writing make you happy ?
 - (9) Which of the three pictures has the best color combination ?

3. Compose two values-clarifying questions using this picture as a basis.

WORKSHEET P. M. SESSION

Please list your grade level:

Text Used:

Story Used:

In your own words, please define:

1. literal level questions-

2. reorganization questions-

3. inferential questions-

4. evaluation questions-

5. appreciation questions-

6. values-clarifying questions-

Using the story you have chosen from your text, write one question for each level. (1-6) Use the back of this sheet if necessary.

Workshop Feedback Sheet

Morning session attended:

Did you enjoy the session?

Will you be using some of the ideas shared in your classroom?

Comments:

Afternoon session attended:

Did you enjoy the session ?

Will you be using some of the ideas shared in your classroom?

Comments:

APPENDIX E

DESCRIPTION OF THE INDICES, RELIABILITY AND
VALIDITY OF THE MYERS-BRIGGS TYPE INDICATOR
(TEST MANUAL, MYERS, 1962)

DESCRIPTION OF THE INDICES, RELIABILITY AND VALIDITY
OF THE MYERS-BRIGGS TYPE INDICATOR

Indices

The Indicator contains separate indices for determining each of the four basic preferences which, under this theory, structure the individual's personality.

<u>Index</u>	<u>Preference as Between</u>	<u>Affects Individual's choice As To</u>
EI	Extraversion or Introversion	Whether to direct perception and judgment upon environment or world of ideas
SN	Sensing or Intuition	Which of these two kinds of perception to rely on
TF	Thinking or Feeling	Which of these two kinds of judgment to rely on
JP	Judgment or Percep- tion	Whether to use judging or per- ceptive attitude for dealing with environment

The EI index is designed to reflect whether the person is an extravert or an introvert in the sense intended by Jung, who coined the terms. The extravert is oriented primarily to the outer world, and thus tends to focus his perception and judgment upon people and things. The introvert is oriented primarily to the inner world postulated in Jungian theory, and thus tends to focus his perception and judgment upon concepts and ideas.

The SN index is designed to reflect the person's preference as between two opposite ways of perceiving, i.e.,

whether he relies primarily on the familiar process of sensing, by which he is made aware of things directly through one or another of his five senses, or primarily on the less obvious process of intuition, which is understood as indirect perception by way of the unconscious, with the emphasis on ideas or associations which the unconscious tacks onto the outside things perceived.

The TF index is designed to reflect the person's preference as between two opposite ways of judging, i.e., whether he relies primarily upon thinking, which discriminates impersonally between true and false, or primarily upon feeling, which discriminates between valued and not-valued.

The JP index is designed to reflect whether the person relies primarily upon a judging process (T or F) or upon a perceptive process (S or N) in his dealings with the outer world, that is, in the extraverted part of his life.

In terms of the theory, a person may reasonably be expected to develop most skill with the processes he prefers to use and in the areas where he prefers to use them. If he prefers E, he should be more adult and effective in dealing with his environment than with ideas. If he prefers S, he should be more effective in perceiving facts than possibilities. If he prefers T, he should be more adult in his thinking judgments than in his feeling judgments. If he prefers J, he should be more skillful at ordering his environment than in adapting to it and conversely.

The main purpose of the Indicator is to ascertain a person's basic preferences. EI, SN, TF and JP are therefore indices designed to point one way or the other, rather than scales designed to measure traits. What each is intended to reflect is a habitual choice between opposites, analogous to right or left-handedness. Thus EI means E or I, rather E to I.

The items of each index offer "forced" choices involving the preference at issue. Responses pointing in opposite directions bear separate weights of 0, 1 or 2, enabling the evidence in each direction to be separately summed. This device permits (a) control of the effect of omissions, and (b) an item-by-item correction for social desirability, undistorted by omissions, which is described in the section on construction of the Indicator, in Part Three.

Persons with more points for E than for I are classed as extraverts and are said to have E scores, as E 7, E 13, etc. Those with more points for I than for E are classed as introverts and are said to have I scores, as I 7, I 13, etc. Since the EI "score" is based on the difference between the points for E and the points for I, and given persons may have either an E score or an I score, but not both.

The letter is considered the most important part of the score, as indicating which of the opposite sides of his nature the person prefers to use, and, presumably, has developed--or can develop--to a higher degree. For instance,

E suggests that he enjoys extraverting more than he enjoys introverting, has therefore given his extravert side considerably more practice, is likely to be better at activities involving extraversion, and will probably find a vocation requiring extraversion most satisfying as a life work. The letters from all four scores, each with corresponding implications, make up the type formula, as ENFP, which describes the type.

The numerical portion of the score shows how strongly the preference is reported, which is not necessarily the same thing as how strongly it is felt.

On every index, the scores run in both directions from zero at the center, where the direction of the reported preference changes. The ranges are:

E 53	-----	0	-----	I 59
S 67	-----	0	-----	N 51
T 49	-----	0	-----	F 51 (males)
T 61	-----	0	-----	F 49 (females)
J 55	-----	0	-----	P 61

The division of each index into two separate scales emphasizes the respectful recognition which type theory accords to opposite kinds of people. Each person is classified in positive terms, by what he likes, not what he lacks. The theory attaches no a priori value judgment to one preference as compared with another, but considers each one valuable and at times indispensable in its own field (Myers, 1962, p. 3).

These basic differences concern the way people prefer to use their minds, specifically the way they use perception and judgment. "Perception" is here understood to include the processes of becoming aware of things or people or occurrences or ideas, and "judgment" is understood to include the processes of coming-to-conclusions about what has been perceived. Together, perception and judgment thus constitute a large portion of the individual's total mental activity. They must also govern a large portion of his outer behavior, since by definition his perception determines what he sees in a situation and his judgment determines what he decides to do about it.

Thus behavior is directly affected by the processes of perception and judgment, and it is entirely reasonable that basic differences in perception or judgment should result in corresponding differences in behavior.

A basic difference in the use of perception arises from the fact that, as Jung points out, mankind is equipped with two distinct and sharply contrasting ways of perceiving. There is not only the familiar process of sensing, by which we become aware of things directly through our five senses. There is also the process of intuition, which is indirect perception by way of the unconscious, accompanied by ideas or associations which the unconscious tacks on to the perceptions coming from outside. These unconscious contributions range from the merest masculine "hunch" or "woman's

intuition" to the crowning examples of creative art or scientific discovery.

Undoubtedly all persons make use of both sorts of perception. But most individuals, from infancy up, enjoy one way of perceiving more than the other. When people prefer sensing, they find too much of interest in the actuality around them to spend much energy listening for ideas out of nowhere. When people prefer intuition, they are too much interested in all the possibilities that occur to them to give a whole lot of notice to the actualities. For instance, the reader who confines his attention strictly to what is said here on the page is following the habit of the people who prefer sensing. One who reads between the lines and runs ahead to the possibilities which arise in his own mind is illustrating the way of the people who prefer intuition (Myers, 1962, pp. 51-52).

A similar basic difference, this time in the use of judgment, arises from the existence of two distinct and sharply contrasting ways of coming to conclusions. One way is by use of thinking, which is a logical process, aimed at an impersonal finding. The other way is by the use of feeling, which is a process of appreciation, equally reasonable in its fashion, bestowing on things a personal, subjective value.

Everyone undoubtedly makes some decision with thinking and some with feeling. But each person is almost certain to

like and trust one way of judging more than the other. If, when one judges these ideas, he concentrates on whether or not they are true, that is thinking-judgment. If one is conscious first of like or dislike, of whether these concepts are sympathetic or antagonistic to other ideas he prizes, that is feeling-judgment.

Whichever judging process a child prefers, whether thinking or feeling, he will use it more often, trust it more implicitly, and be much more ready to obey its dictates. The other kind of judgment will be a sort of minority opinion, half heard and often wholly disregarded.

Thus in the natural course of events, the child who prefers thinking and the child who prefers feeling develop along divergent lines, even when both like the same perceptive process and start with the same perceptions. Each is happiest and most effective in activities that call for the sort of judgments that he is best equipped to make. The child who prefers feeling becomes more adult in the handling of human relationships. The child who prefers thinking becomes more adult in the organization of facts and ideas. And each acquires the surface traits that result from his basic preference for the personal or the impersonal approach to life (Myers, 1962, pp. 52-53)

Reliability

What has been done is to investigate reliability on various levels by the use of a logically-split-half proce-

cedure. Each index has been split into halves, taking all available item statistics into consideration and pairing items that most resemble each other and correlate most highly. The resulting X and Y halves should, therefore, "represent faithfully the total test in all significant respect," as Guilford (1954, p. 373) recommends.

Split-half reliabilities were obtained by applying the Spearman-Brown prophecy formula to obtained correlations between halves. These correlations range from .88 to .70 with a single correlation of .44 for the TF scale with underachieving eighth graders.

These reliabilities appear creditable for an instrument of this sort, representing in general the upper range of coefficients found in self-report instruments of similar length. It may be noted that while a wide range of age, intellectual ability and socio-economic status is included, the only coefficients below .75 are for the underachieving eighth grade and the non-prep twelfth and that much the lowest values for these groups are on TF. The possibility would seem to exist that the relative uncertainty on TF may reflect a lesser development of the judging process, which may prove to be a significant characteristic of such samples (Myers, 1962, p. 20).

Two aspects are worth noting. One is the systematic way in which reliabilities vary with the character of the sample. The clearly superior twelfth grade and college

samples, comprising boys who were National Merit finalists, girls in advanced twelfth grade courses, and random samples of 100 each from the highly selected freshman classes of Brown and Pembroke, have reliabilities from .80 to .94 with the median at .85. The regular academic twelfth grade samples have reliabilities from .76 to .88, with the median at .81. The boys in the non-prep twelfth grade and the intelligent but low-achieving eighth grade sample have reliabilities from .80 down to .44, with median at .73. The contrasts may be due to differences in understanding, vocabulary, motivation, etc., or to actual differences in type development, or to all of these factors in combination.

A second point concerns the TF index, which, in the least able samples, has a strikingly lower reliability than any other index. Since TF pulls up to parity with other indices in the samples from Brown and Pembroke, the unreliability would not seem to lie in the TF index itself. More probably the low coefficients reflect the fact that the development of judgment (whether T or F) is one of the slowest and most reluctant achievements in the process of growing up (Myers, 1962, pp. 20-21).

In addition, the Gray-Wheelwright Psychological Type Questionnaire was constructed by two Jungian analysts on the West coast, at about the same time as the Type Indicator was being constructed on the East coast, quite independently and with no intercommunication. It has the same

purpose as the Indicator, to identify the Jungian types, and proceeds by inquiring to the subject's preferences as between extraversion and introversion, sensation and intuition, and thinking and feeling. It has no scale for JP and thus does not reflect the important differences in behavior that result from using judgment rather than perception (or perception rather than judgment) in the extraverted part of one's life. On its scales corresponding to EI, SN and TF, split-half reliabilities are markedly lower than any computed for the Indicator. But the true variance of these scales can be assumed to reflect, as faithfully as the difficulties of test construction permit, Gray's and Wheelwright's conception of the essential nature of the Jungian opposites.

A study in which the Type Indicator and the 14th edition of the Gray-Wheelwright were both administered to 47 male students at Golden Gate College is reported by Stricker & Ross (1962). The observed intercorrelations reported in the test manual range from .84 for EI and JP, .81 for TF, and .62 for SN (Myers, 1962, p. 21).

Reliability was further established by correlating the Type Indicator with the Strong Vocational Blank, the Allport-Vernon-Lindzey Study of Values, the Edwards Personal Preference Schedule, and the Personality Research Inventory.

Validity

In addition, the Type Indicator was shown to be

concurrently valid by being positively correlated with non-test variables such as faculty ratings, job turn-over, creativity, and scholastic achievement. The figures for all the categories are given in the manual and indicate the test to be adequate in all categories. The manual for the rest reports all figures for reliability and validity completely and is complete in analysis of performance of the various types and should be consulted prior to interpretation of the specific scores (Myers, 1962).

APPENDIX F

SAMPLES OF THE DATA-COLLECTING MATERIALS

Dear Teacher,

Thank you for participating in the Loyola University Research Project. We realize that at the present time you may be somewhat unsure of what we are doing and your part in it. As you read through the rest of this letter you will find out your part in the plan, but you will not yet learn all the details. That will not be clear to you until early spring. We wish it could be different, but the "secrecy" is necessary because of the experimental design.

After the experiment, all information will be available to you about the group as a whole, and if you wish, about yourself as an individual.

In order to allow you complete privacy, we have a code name on the outside of the envelope and a card inside the envelope with the same name for your records. No one need know who you are unless you wish to identify yourself.

Inside the envelope you will find the following items:

1. A one hour tape. We would like you to tape only on one side a half hour discussion lesson in your classroom. Social studies, science, reading comprehension, literature discussions are generally good areas for this type of lesson. However, you may choose any subject area you wish, provided you plan at least a half hour of discussion with the class.

These tapes will be returned to you later in the school year, and you will do the same kind of lesson on the other half-hour side.

2. The Meyers-Briggs survey for you to complete.
3. The Total Involvement Inventory to be completed.
4. A biographical profile to be completed.
5. A card with your code name to be retained by you.

Side I of the tape and the other items should be returned in the original envelope via school mail to your district reading consultant or to your superintendent, both of whom are cooperating with the university in this research.

Again, we thank you for your help. Hopefully, together we can add some vitally needed information in the field of education.

The Loyola University Researchers

THE INVOLVEMENT INVENTORY

Richard Heslin and Brian Blake

Development. The Involvement Inventory is the outgrowth of the first author's curiosity about some differences between himself, his wife and his friends. The differences at first appeared to involve whether people approached life in an active or passive way. However, the differences became more complex when we looked carefully at the people and their orientations. Plato's three-fold view of people seemed to be relevant to the active-passive orientations. He described three kinds of men: philosophers, warriors, and the rest of us. His philosophers were concerned with intellect, his warriors with courage and will, and the rest with self-gratification. In current terminology these emphases are roughly analogous to cognition (ideas), motivation (getting things done), and emotions (feelings).

In order to measure these orientations, statements were written to indicate an active orientation regarding feelings and interpersonal involvement, i.e., an open, expressive, extroverted manner. Statements were also written to measure an active orientation toward objects and the material world, i.e., a task-accomplishing, project-completing set. Finally, statements were written that described a person who was very active in his approach to ideas and the pronouncements he hears from people, i.e., statements indicating an analytic, questioning, examining set.

Thus the Involvement Inventory is based on a philosophy that there are three important phenomena in life with which a person must interact: (1) people, (2) objects, and (3) ideas. The person's comfort and ability to cope with the experiences he has with these phenomena affect whether he is able to reach out to them, grasp them and use them, or is tentative in his approach to them, or even avoids encountering them. These may be thought of as phenomenological arenas in which he may expend whatever amount of energy he chooses in meeting the challenges which present themselves within the arenas.

In summary, the Involvement Inventory measures three characteristics of people:

- (A) Affective, or feeling, involvement with people,
- (b) Behavioral involvement in accomplishing tasks, and
- (c) Cognitive involvement with analyzing pronouncements encountered.

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The ABC scales taken together represent a generally active involvement in and orientation toward life. A low scorer on the A scale tends to be affectively passive, emotionally controlled, and interpersonally cautious. A low scorer on the B scale tends to be a follower, finds it difficult to plan ahead, and finds doing projects distasteful. A person who scores low on the C scale tends to be accepting of information he receives, uninterested or unwilling to challenge information that comes to him, and willing to believe pronouncements of others.

The Involvement Inventory has been subjected to extensive testing and refinement. The present version of the instrument has been found to be reliable ($A = .76$, $B = .78$, $C = .76$, total = $.78$) and valid (e.g., compared to low scorers, high A scale scorers prefer spending spare time with friends, high B scale scorers are involved in far more activities, and high C scale scorers are more likely to reject parental religious and political views). The correlation among the scales is A-B $.37$, A-C $.18$, B-C $.49$, or an average of $.34$. These correlations indicate moderate overlap in content.

SCORING

The response categories are weighted as follows: Disagree = 1; Unsure, probably disagree = 2; Unsure, probably agree = 3; and agree = 4. For statements that are reversed items, agreement indicates low involvement; the weighting is: Disagree = 4; Unsure, probably disagree = 3; Unsure, probably agree = 2; and Agree = 1. Statements that are reverse weighted appear in the latter portion of each scale. (A scale = statements 1-39, B scale = statements 40-74, C scale = 75-102). The totals of the three scales can be added together for the overall involvement score.

Uses of the Instrument. The Involvement Inventory can be used to explore issues of life style. A person can get some insight into (1) how much energy he is expending beyond meeting the maintenance needs of his life and job, (2) whether that energy is focused in one of the three phenomenological arenas of life and (3) which one or two arenas are the focus of his energy and involvement.

The Involvement Inventory can be used to help a person generate a personal agenda for a workshop if he concludes that he is distributing his time and energy in a way that is not fruitful or if he feels that the way he copes with the three arenas is getting in his way at work or home. Participants in a workshop can be given this inventory on the first day. Scoring of their responses can be done by them or by clerical assistants. It is important that the participants get their scores relatively early so that they can use the information in the workshop. The facilitator may have the participants post their scores on the A, B, and C scales and on the total instrument using newsprint and felt-tipped markers. Make a group frequency

distribution for each of the 4 scores using a chalkboard or newsprint. Have the members form into small groups (2-6 people) to interpret each other's score patterns and check out how the respondent sees his own scores. The instrument is also a useful device to teach the concepts of high and low involvement in each of the three arenas and in combinations of the three.

If the facilitator wishes to compare his group's scores with those of another group, the following norms are included as an example. The group illustrated was composed of 20 individuals functioning on some level as small group facilitators who were involved in a workshop in Montreal. Their backgrounds were fairly diverse and included industrial management, education, the clergy, and clinical psychology. Ages ranged from 25 to 55 years. The medians for this group were: A scale = 116, B scale = 100, and C scale = 86. The median for the total equalled 300. For purposes of identifying significantly high or low scores, the middle fifty per cent ranged from 107 to 122 for the A scale, 88 to 109 for the B scale, and 78 to 92 for the C scale. The total ranged between 289 and 320.

THE INVOLVEMENT INVENTORY Scoring

1. The A scale (affective or feeling involvement with people) includes items 1 through 39. Items 1 through 19 are weighed differently than items 20 through 39. Draw a line under item 19 on the scoring sheet. Add the checks in each column for items 1 through 19 and place the sum in the spaces below. Multiply each column total by the multiplier beneath it. Add the four products across and put the total in the blank designated (A).

$$\begin{array}{ccccccc} \overline{x1} & \overline{x2} & \overline{x3} & \overline{x4} & & & \\ \hline & + & & + & & + & \\ \hline & & & & & & = \end{array} \quad (A)$$

Draw a line under item 39. Add the checks in each column for items 20 through 39 and proceed as you did with items 1 through 19 (notice that the multipliers are reversed from those for items 1 through 19).

$$\begin{array}{ccccccc} \overline{x4} & \overline{x3} & \overline{x2} & \overline{x1} & & & \\ \hline & + & & + & & + & \\ \hline & & & & & & = \end{array} \quad (a)$$

2. The B scale (Behavioral involvement in accomplishing tasks) includes items 40 through 74. Draw a line under item 57. Proceed with the scoring as above.

$$\begin{array}{ccccccc} \overline{x1} & \overline{x2} & \overline{x3} & \overline{x4} & & & \\ \hline & & & & & & = \end{array} \quad (B)$$

Draw a line under item 74 and proceed as above.

$$\begin{array}{ccccccc} \overline{x4} & \overline{x3} & \overline{x2} & \overline{x1} & & & \\ \hline & + & & + & & + & \\ \hline & & & & & & = \end{array} \quad (b)$$

3. The C scale (Cognitive involvement with analyzing pronouncements encountered) includes items 75 through 102. Draw a line under item 91 and proceed with the scoring as above.

$$\begin{array}{ccccccc} \overline{x1} & \overline{x2} & \overline{x3} & \overline{x4} & & & \\ \hline & + & & + & & + & \\ \hline & & & & & & = \end{array} \quad (C)$$

Total the remaining columns and proceed as above.

$$\frac{x_4}{\quad} + \frac{x_3}{\quad} + \frac{x_2}{\quad} + \frac{x_1}{\quad} = \quad (c)$$

4. Obtain scale scores by adding the totals for each two-part scale. Then, obtain the total involvement score by adding the three scale scores.

$$A + a = \quad$$

$$B + b = \quad$$

$$C + c = \quad$$

$$\text{Total involvement score} = \quad$$

INVOLVEMENT INVENTORY

Answer Sheet

	Disagree	Unsure, Probably Disagree	Unsure, Probably Agree	Agree		Disagree	Unsure, Probably Disagree	Unsure, Probably Agree	Agree		Disagree	Unsure, Probably Disagree	Unsure, Probably Agree	Agree
1.					35.					69.				
2.					36.					70.				
3.					37.					71.				
4.					38.					72.				
5.					39.					73.				
6.					40.					74.				
7.					41.					75.				
8.					42.					76.				
9.					43.					77.				
10.					44.					78.				
11.					45.					79.				
12.					46.					80.				
13.					47.					81.				
14.					48.					82.				
15.					49.					83.				
16.					50.					84.				
17.					51.					85.				
18.					52.					86.				
19.					53.					87.				
20.					54.					88.				
21.					55.					89.				
22.					56.					90.				
23.					57.					91.				
24.					58.					92.				
25.					59.					93.				
26.					60.					94.				
27.					61.					95.				
28.					62.					96.				
29.					63.					97.				
30.					64.					98.				
31.					65.					99.				
32.					66.					100.				
33.					67.					101.				
34.					68.					102.				

INVOLVEMENT INVENTORY
Richard Heslin and Brian Blake

Directions: Indicate your level of agreement with each statement by placing a check in the appropriate space on the answer sheet. Do not spend a lot of time on any one item. Respond with your initial reaction.

1. I like to get close to people.
2. I find it easy to express affection.
3. When I become angry, people know it.
4. When I am happy, I like to shout and whoop it up.
5. I am the kind of person who would shout a friend's name across a crowded room if I saw him come in the door.
6. I know I would stand up in a group and call a liar a liar.
7. I enjoy the shoulder to shoulder contact with other people in a crowded elevator.
8. The wise thing for a person to do is argue his case with a policeman who has pulled him over for speeding.
9. I like to flirt with someone I find attractive even if I'm not serious.
10. I am an expressive person.
11. I prefer dogs to cats.
12. I have struck up a conversation with another person while waiting for an elevator.
13. The thought of participating in one of these "sensitivity training" groups where people tell each other exactly how they feel really appeals to me.
14. If someone is driving down the street and sees a friend walking in the opposite direction, he should honk his horn and wave to him.
15. It is a thrill to walk into a party alone with a large group already there.
16. I like to dance the latest dances at a party.
17. If I am required to have continual close contact with someone who has irritating habits, I would bring them to his attention.
18. After I have been reading for some time, I have to spend some time talking with someone, otherwise I feel lonely.
19. If I were emotionally attached to someone, I could sing a song or say a poem to him (her).
20. I get nervous when people get personal with me.
21. I am able to hide my feelings when I feel sad or angry.
22. People consider me a serious person.
23. When I am angry, I become quiet.
24. I never am wholly relaxed with other people.
25. I wish I were more relaxed and free wheeling in my dealing with my friends.

26. I have never spoken harshly to anyone.
27. If a friend of mine was concerned about something that he was embarrassed to speak about, I would probably let him work it out himself.
28. I become embarrassed when the topic of conversation touches on something the other person wants to avoid.
29. If someone challenged something I said in a decidedly hostile manner, I would probably break off the conversation at the first convenient opportunity.
30. It is best to forget an unpleasant person.
31. I get as much kick out of watching an exciting game of football or basketball as I do playing a game.
32. Even though I may want to, I feel nervous about putting my arm around the shoulder of a friend.
33. There are many times when I have held back from saying what I knew I should say because I didn't want to hurt someone's feelings.
34. If a person does something to hurt a friend, he should do something to make it up to him rather than mentioning or apologizing for the hurt.
35. If I were riding on a train and the car I was in had only one of a pair of seats empty, I would go on to another car looking for a double seat that was empty so that I wouldn't have to sit with someone.
36. I am never quite sure how to handle it when someone flirts with me.
37. If a good looking married man puts his arm around a woman in a friendly manner while talking to her, she should disengage herself at the first appropriate chance.
38. When people tease me in a group, I often do not know what to say in response.
39. I prefer watching television to sitting around and talking.
40. I always have at least four projects going at once.
41. I am the one who gets others going and in action.
42. I tend to take charge in my groups and direct the others.
43. I like to take risks.
44. I would rather build something than read a novel.
45. I have a very strong need to run things and organize things, even though doing so cuts into time I might devote to other activities.
46. I love to repair things.
47. I love to work with my hands building things.
48. I have strong "arts and crafts" interests.
49. I do good work with my hands.
50. Nothing is quite so enjoyable as winning in competition.
51. I enjoy persuading people.
52. I enjoy playing competitive athletics.
53. It would be fun to try to make a radio (or woman's suit) using only a very basic blueprint (or pattern).
54. As an accomplishment, I get a bigger kick out of the Panama Canal than out of the Theory of Evolution.
55. Even though I may delegate tasks to people who are helping me, it makes me nervous to do so because I know if I want it done right, I should do it myself.

56. I find that I work faster than most people I know.
57. I have always enjoyed constructing model airplanes, ships, cars, and things like that.
58. I prefer to follow and let someone else take the lead.
59. I like to keep my risk low.
60. I prefer to be involved in an activity that another person rather than myself has organized.
61. I doubt that I could produce and market a product successfully.
62. I would rather read a play than make something.
63. I wouldn't know where to begin if I had to build something like a fireplace.
64. I avoid taking chances.
65. I would rather play solitaire than build a birdhouse.
66. I prefer to join a group that is already well established, rather than join a new one.
67. For me the greatest joy is in finding out about things rather than in doing things.
68. Life is so short that we should spend more time enjoying it and less time rushing around doing various projects.
69. I average more than seven hours of sleep a night.
70. I prefer to stick with one task until it is done before taking on another task.
71. I find it more gratifying to work out a successful compromise with the opposition, than to compete with and defeat them.
72. When I am bored, I like to take a nap.
73. True contentment lies in coming to a harmonious adjustment with life rather than continually trying to "improve" it.
74. I envy the people in some religious orders who have time for peaceful contemplation and well-organized daily routine.
75. I love to try to spot the logical flaw in TV commercials.
76. You take a big chance if you don't listen to more than one version about something.
77. I would not hesitate to write to any source or official to get the information I need on some problem.
78. I try to read two or three versions of a problem I am trying to understand.
79. I enjoy debating issues.
80. I enjoy analyzing two opposing views to find where they differ and where they agree.
81. When someone tells me something that does not sound quite right, I often check his source.
82. My acquaintances turn to me for new slants on the issues of the day.
83. I have more information about what is going on than my associates.
84. It is almost always worth the effort to dig out the facts yourself by reading a number of viewpoints on an issue.
85. I don't believe that any religion is the one true religion.
86. I don't believe in life after death.
87. It is a good idea to read one or two foreign newspapers as a check on our Associated Press and United Press International dominated newspapers.

88. Governmental response to such things as air pollution, water pollution, pesticide poisoning, and population explosion leads one to believe that it does not have the public welfare as its main interest.
89. It is fun to search far and wide to gather in all of the appropriate information about a topic to be evaluated.
90. I like a friendly argument about some issue of the day.
91. If people were forced to describe me as either short-tempered or overcritical they would probably say that I am overcritical.
92. I have trouble finding things to criticize in something I read.
93. Most of what I read seems reasonable to me.
94. I wish someone would put out a book of known facts so that people would know what is right these days.
95. I don't like to argue ideas.
96. You should take the expert's word on things unless you know for sure that they are wrong.
97. I would rather read a summary of the facts in an area than try to wade through the details myself.
98. I get almost all of my news information from television.
99. As with most people, 95 percent of my opinions come from personal acquaintances.
100. Once I have made up my mind on an issue, I stick to it.
101. If people were forced to describe me as either selfish or narrow minded, they would probably say that I am narrow minded.
102. Most of my acquaintances would describe me as productive rather than as individualistic.

MYERS-BRIGGS TYPE INDICATOR (F)

READ THESE DIRECTIONS FIRST:

This is a test to show which sides of your personality you have developed the most.

The answer you choose to any question is neither "right" nor "wrong." It simply helps to point out what type of person you are, and therefore where your special strengths lie and what kinds of work you may like to do.

For each question, choose the answer which comes closest to how you usually feel or act. Mark your choice on the separate answer sheet, as shown in the samples below:

Sample Question

Sample Answer Sheet

167. Are your interests				(B) varied			
(A) few and lasting							
<u>Form</u>	<u>F</u>	<u>Answer</u>	<u>Sheet</u>	<u>Form</u>	<u>Fs</u>	<u>Answer</u>	<u>Sheet</u>
		A	B			A	B
167		=	=	167		□	■

If your interests are varied, you would mark answer "B" as it is marked above. If they are few and lasting, you would mark "A." Be sure that each mark is black and completely fills the answer space. If you change an answer, be sure that all previous marks are completely erased. Incomplete erasures may be read as intended answers.

If you find a question where you cannot choose, do not mark both answers. Just skip the question and go on.

IF YOUR ANSWER SHEET IS FORM F ...

Fill in all facts (Name, etc.) called for at the top of the answer sheet. Then open your test booklet, start with Question 1, and work straight to the end of the test without stopping, recording your answers on the separate answer sheet (marked Form F).

IF YOUR ANSWER SHEET IS FORM Fs ...

Fill in all the facts (Name, etc.) called for in the center section. Turn your answer sheet so that the corner headed "Print last name .." is at the top right hand corner.

Starting at the arrow on the left, print as many letters of your last name as will fit (up to thirteen) in the large boxes of the Last Name

section. Print one letter in each large box. Do not go beyond the heavy line which separates last name and first name sections even if you cannot complete your last name. If your last name has fewer than thirteen letters, use as many boxes as you need and leave the rest blank.

After you have finished printing as many letters of your last name as will fit in the boxes to the left of the heavy line, print as many letters of your first name as will fit (up to seven), beginning at the heavy line and stopping at the last box on the right. Print one letter in each box. If your first name has fewer than seven letters, use as many boxes as you need and leave the rest blank.

Now look at the columns under each letter you have printed. Each column has a small box for each letter of the alphabet. Go down the column under each letter you have printed, find the small box labeled with the corresponding letter, and blacken that small box. Do this for each letter you have printed in the large boxes across the top.

Now, note the section below where sex, age, and test date are requested. Under "sex," mark Male or Female, as appropriate; then, write in your age and today's date in the large boxes of the age and test date section, and darken the appropriate answer boxes below.

Find the section of your answer sheet headed "Part 1." Open your test booklet, start with Question 1, and work straight to the end of the test without stopping, recording your answers on the separate answer sheet (marked Form Fs).

Educational Testing Service, Princeton, New Jersey

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PART I

1. Does following a schedule
(A) appeal to you
(B) cramp you
2. Do you usually get on better with
(A) imaginative people
(B) realistic people
3. If strangers are staring at you in a crowd, do you
(A) often become aware of it
(B) seldom notice it
4. Are you more careful about
(A) people's feelings
(B) their rights
5. Are you
(A) inclined to enjoy deciding things
(B) just as glad to have circumstances decide a matter for you
6. As a guest, do you more enjoy
(A) joining in the talk of the group
(B) talking separately with people you know well
7. When you have more knowledge or skill in something than the people around you, is it more satisfying
(A) to guard your superior knowledge
(B) to share it with those who want to learn
8. When you have done all you can to remedy a troublesome situation, are you
(A) able to stop worrying about it
(B) still more or less haunted by it
9. If you were asked on a Saturday morning what you were going to do that day, would you
(A) be able to tell pretty well
(B) list twice as many things to do as any day can hold
(C) have to wait and see
10. Do you think on the whole that
(A) children have the best of it
(B) life is more interesting for grown-ups
11. In doing something which many other people do, does it appeal more to you
(A) to do it in the accepted way
(B) to invent a way of your own

GO ON TO THE NEXT PAGE

12. When you were small, did you
 - (A) feel sure of your parents' love and devotion to you
 - (B) feel that they admired and approved of some other child more than they did of you
13. Do you
 - (A) rather prefer to do things at the last minute
 - (B) find it hard on the nerves
14. If a breakdown or mix-up halted a job on which you and a lot of others were working, would your impulse be
 - (A) to enjoy the breathing spell
 - (B) to look for some part of the work where you could still make progress
 - (C) to join the "trouble-shooters" who were wrestling with the difficulty
15. Do you
 - (A) show your feelings freely as you go along
 - (B) keep them to yourself
16. When you have decided upon a course of action, do you
 - (A) reconsider it if unforeseen disadvantages are pointed out to you
 - (B) usually put it through to a finish, however it may inconvenience yourself and others
17. In reading for pleasure, do you
 - (A) enjoy odd or original ways of saying things
 - (B) wish writers would say exactly what they mean
18. In any of the ordinary emergencies of life (not matters of life or death), do you prefer
 - (A) to take orders and be helpful
 - (B) to give orders and be responsible
19. At parties, do you
 - (A) sometimes get bored
 - (B) always have fun
20. Is it harder for you to adapt to
 - (A) routine
 - (B) constant change
21. Would you be more willing to take on a heavy load of extra work for the sake of
 - (A) additional comforts and luxuries
 - (B) the chance of becoming famous through your work

GO ON TO THE NEXT PAGE

22. Are the things you plan or undertake
(A) almost always things you can finish
(B) frequently things that prove too difficult to carry through
23. Are you more attracted
(A) to a person with a quick and brilliant mind
(B) to a practical person with a lot of horse sense
24. Do you find people in general
(A) slow to appreciate and accept ideas not their own
(B) reasonably open-minded
25. When you have to meet strangers, do you find it
(A) pleasant, or at least easy
(B) something that takes a good deal of effort
26. Are you inclined
(A) to value sentiment above logic
(B) to value logic above sentiment
27. Do you like
(A) to arrange your dates and parties some distance ahead
(B) to be free to do whatever looks like fun at the time
28. In making plans which concern other people, do you prefer
(A) to take them into your confidence
(B) to keep them in the dark till the last possible moment
29. Which of these two is the higher compliment
(A) he is a person of real feeling
(B) he is consistently reasonable
30. When you have to make up your mind about something, do you like to
(A) do it right away
(B) postpone the decision as long as you reasonably can
31. When you run into an unexpected difficulty in something you are doing, do you feel it to be
(A) a piece of bad luck
(B) a nuisance
(C) all in the day's work
32. Do you almost always
(A) enjoy the present moment and make the most of it
(B) feel that something just ahead is more important
33. Are you
(A) easy to get to know
(B) hard to get to know

34. With most of the people you know, do you
(A) feel that they mean what they say
(B) feel you must watch for a hidden meaning
35. When you start a big project that is due in a week, do you
(A) take time to list the separate things to be done and the order of doing them
(B) plunge in
36. In solving a personal problem, do you
(A) feel more confident about it if you have asked other people's advice
(B) feel that nobody else is in as good a position to judge as you are
37. Do you admire more the person who is
(A) conventional enough never to make himself conspicuous
(B) too original and individual to care whether he is conspicuous or not
38. Which mistake would be more natural for you
(A) to drift from one thing to another all your life
(B) to stay in a rut that didn't suit you
39. When you run across people who are mistaken in their beliefs, do you feel that
(A) it is your duty to set them right
(B) it is their privilege to be wrong
40. When an attractive chance for leadership comes to you, do you
(A) accept it if it is something you can really swing
(B) sometimes let it slip because you are too modest about your own abilities
(C) or doesn't leadership ever attract you
41. In your crowd, are you
(A) one of the last to hear what is going on
(B) full of news about everybody
42. Are you at your best
(A) when dealing with the unexpected
(B) when following a carefully worked-out plan
43. Does the importance of doing well on a test make it generally
(A) easier for you concentrate and do your best
(B) harder for you to concentrate and do yourself justice
44. In your free hours, do you
(A) very much enjoy stopping somewhere for refreshments
(B) usually want to use the time and money another way

GO ON TO THE NEXT PAGE

45. At the time in your life when things piled up on you the worst, did you find
(A) that you had got into an impossible situation
(B) that by doing only the necessary things you could work your way out
46. Do most of the people you know
(A) take their fair share of praise and blame
(B) grab all the credit they can but shift any blame on to someone else
47. When you are in an embarrassing spot, do you usually
(A) change the subject
(B) turn it into a joke
(C) days later, think of what you should have said
48. Are such emotional "ups and downs" as you may feel
(A) very marked
(B) rather moderate
49. Do you think that having a daily routine is
(A) a comfortable way of getting things done
(B) painful even when necessary
50. Are you naturally
(A) a "good mixer"
(B) rather quiet and reserved in company
51. In your early childhood (at six or eight), did you
(A) feel your parents were very wise people who should be obeyed
(B) find their authority irksome and escape it when possible
52. When you have a suggestion that ought to be made at a meeting, do you
(A) stand up and make it as a matter of course
(B) hesitate to do so
53. Do you get more annoyed at
(A) fancy theories
(B) people who don't like theories
54. When helping in a group undertaking, are you more often struck by
(A) the inspiring quality of shoulder to shoulder cooperation
(B) the annoying inefficiency of loosely organized group work
(C) or don't you get involved in group undertakings
55. When you go somewhere for the day, would you rather
(A) plan what you will do and when
(B) just go

GO ON TO THE NEXT PAGE

56. Are the things you worry about
(A) often really not worth it
(B) always more or less serious
57. In making an important decision on a given set of facts, do you
(A) find you can trust your feeling judgments
(B) need to set feeling aside and rely on analysis and cold logic
58. In the matter of friends, do you tend to seek
(A) deep friendship with a very few people
(B) broad friendship with many different people
59. Do you think your friends
(A) feel you are open to suggestions
(B) know better than to try to talk you out of anything you've decided to do
60. Does the idea of making a list of what you should get done over a week-end
(A) appeal to you
(B) leave you cold
(C) positively depress you
61. In traveling, would you rather go
(A) with a companion who had made the trip before and "knew the ropes"
(B) alone or with someone greener at it than yourself
62. Which of these two reasons for doing a thing sounds more attractive to you
(A) this is an opportunity that may lead to bigger things
(B) this is an experience that you are sure to enjoy
63. In your personal beliefs, do you
(A) cherish faith in things which cannot be proved
(B) believe only those things which can be proved
64. Would you rather
(A) support the established methods of doing good
(B) analyze what is still wrong and attack unsolved problems
65. Has it been your experience that you
(A) frequently fall in love with a notion or project which turns out to be a disappointment - so that you "go up like a rocket and come down like the stick"
(B) use enough judgment on your enthusiasms so that they do not let you down
66. Would you judge yourself to be
(A) more enthusiastic than the average person
(B) less excitable than the average person

GO ON TO THE NEXT PAGE

67. If you divided all the people you know into those you like, those you dislike, and those toward whom you feel indifferent, would there be more of
(A) those you like
(B) those you dislike
68. In your daily work, do you (for this item only if two are true mark both)
(A) rather enjoy an emergency that makes you work against time
(B) hate to work under pressure
(C) usually plan your work so you won't need to
69. Are you more likely to speak up in
(A) praise
(B) blame
70. Is it higher praise to call someone
(A) a man of vision
(B) a man of common sense
71. When playing cards, do you enjoy most
(A) the sociability
(B) the excitement of winning
(C) the problem of getting the most out of each hand
(D) the risk of playing for stakes
(E) or don't you enjoy playing cards

GO ON TO PART II

PART II

Sample Question

167.	Are your interests
	(A) few and lasting
	(B) varied

Sample Answer Sheet

	A	B
167	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If your interests are varied, you would mark answer box "B" as it is marked on the sample above. If they are few and lasting you would mark "A."

WHICH WORD IN EACH PAIR APPEALS TO YOU MORE?

72.	(A)	firm-minded	warm-hearted	(B)
73.	(A)	imaginative	matter-of-fact	(B)
74.	(A)	systematic	spontaneous	(B)
75.	(A)	congenial	effective	(B)
76.	(A)	theory	certainty	(B)
77.	(A)	party	theater	(B)
78.	(A)	build	invent	(B)
79.	(A)	analyze	sympathize	(B)
80.	(A)	popular	intimate	(B)
81.	(A)	benefits	blessings	(B)
82.	(A)	casual	correct	(B)
83.	(A)	active	intellectual	(B)
84.	(A)	uncritical	critical	(B)
85.	(A)	scheduled	unplanned	(B)
86.	(A)	convincing	touching	(B)
87.	(A)	reserved	talkative	(B)
88.	(A)	statement	concept	(B)
89.	(A)	soft	hard	(B)
90.	(A)	production	design	(B)
91.	(A)	forgive	tolerate	(B)
92.	(A)	hearty	quiet	(B)
93.	(A)	who	what	(B)
94.	(A)	impulse	decision	(B)
95.	(A)	speak	write	(B)
96.	(A)	affection	tenderness	(B)
97.	(A)	punctual	leisurely	(B)
98.	(A)	sensible	fascinating	(B)
99.	(A)	changing	permanent	(B)
100.	(A)	determined	devoted	(B)
101.	(A)	system	zest	(B)
102.	(A)	facts	ideas	(B)
103.	(A)	compassion	foresight	(B)
104.	(A)	concrete	abstract	(B)
105.	(A)	justice	mercy	(B)
106.	(A)	calm	lively	(B)
107.	(A)	make	create	(B)

WHICH WORD IN EACH PAIR APPEALS TO YOU MORE?

108.	(A)	wary	trustful	(B)
109.	(A)	orderly	easy-going	(B)
110.	(A)	approve	question	(B)
111.	(A)	gentle	firm	(B)
112.	(A)	foundation	spire	(B)
113.	(A)	quick	careful	(B)
114.	(A)	thinking	feeling	(B)
115.	(A)	theory	experience	(B)
116.	(A)	sociable	detached	(B)
117.	(A)	sign	symbol	(B)
118.	(A)	systematic	casual	(B)
119.	(A)	literal	figurative	(B)
120.	(A)	peacemaker	judge	(B)
121.	(A)	accept	alter	(B)
122.	(A)	agree	discuss	(B)
123.	(A)	executive	scholar	(B)

GO ON TO PART III

PART III

ANSWER THESE QUESTIONS USING THE DIRECTIONS FOR PART I, ON THE FRONT COVER

124. Do you find the more routine parts of your day
(A) restful
(B) boring
125. If you think you are not getting a square deal in a club or team to which you belong, is it better
(A) to shut up and take it
(B) to use the threat of resigning if necessary to get your rights
126. Can you
(A) talk easily to almost anyone for as long as you have to
(B) find a lot to say only to certain people or under certain conditions
127. When strangers notice you, does it
(A) make you uncomfortable
(B) not bother you at all
128. If you were a teacher, would you rather teach
(A) fact courses
(B) courses involving theory
129. In your crowd, are you usually
(A) one of the first to try a new thing
(B) one of the last to fall into line
130. In solving a difficult personal problem, do you
(A) tend to do more worrying than is useful in reaching a decision
(B) feel no more anxiety than the situation requires
131. If people seem to slight you, do you
(A) tell yourself they didn't mean anything by it
(B) distrust their good will and stay on guard with them thereafter
132. When there is a special job to be done, do you like
(A) to organize it carefully before you start
(B) to find out what is necessary as you go along
133. Do you think it is a worse fault
(A) to show too much warmth
(B) not to have warmth enough

GO ON TO THE NEXT PAGE

134. At a party, do you like
(A) to help get things going
(B) to let the others have fun in their own way
135. When a new opportunity comes up, do you
(A) decide about it fairly quickly
(B) sometimes miss out through taking too long to make up your mind
136. In managing your life, do you tend
(A) to undertake too much and get into a tight spot
(B) to hold yourself down to what you can comfortably swing
137. When you find yourself definitely in the wrong, would you rather
(A) admit you are wrong
(B) not admit it, though everyone knows it
(C) or don't you ever find yourself in the wrong
138. Can the new people you meet tell what you are interested in
(A) right away
(B) only after they really get to know you
139. In your home life, when you come to the end of some undertaking, are you
(A) clear as to what comes next and ready to tackle it
(B) glad to relax until the next inspiration hits you
140. Do you think it more important to be able
(A) to see the possibilities in a situation
(B) to adjust to the facts as they are
141. Would you say that the people you know personally owe their successes more to
(A) ability and hard work
(B) luck
(C) bluff, pull, and shoving themselves ahead of others
142. In getting a job done, do you depend on
(A) starting early, so as to finish with time to spare
(B) the extra speed you develop at the last minute
143. After associating with superstitious people, have you
(A) found yourself slightly affected by their superstitions
(B) remained entirely unaffected
144. When you don't agree with what has just been said, do you usually
(A) let it go
(B) put up an argument
145. Would you rather be considered
(A) a practical person
(B) an ingenious person

146. Out of all the good resolutions you may have made, are there
(A) some you have kept to this day
(B) none that have really lasted
147. Would you rather work under someone who is
(A) always kind
(B) always fair
148. In a large group, do you more often
(A) introduce others
(B) get introduced
149. Would you rather have as a friend someone who
(A) is always coming up with new ideas
(B) has both feet on the ground
150. When you have to do business with strangers do you feel
(A) confident and at ease
(B) a little fussed or afraid that they won't want to bother with you
151. When it is settled well in advance that you will do a certain thing at a certain time, do you find it
(A) nice to be able to plan accordingly
(B) a little unpleasant to be tied down
152. Do you feel that sarcasm
(A) should never be used where it can hurt people's feelings
(B) is too effective a form of speech to be discarded for such a reason
153. When you think of some little thing you should do or buy, do you
(A) often forget it until much later
(B) usually get it down on paper before it escapes you
(C) always carry through on it without reminders
154. Do you more often let
(A) your heart rule your head
(B) your head rule your heart
155. In listening to a new idea, are you more anxious to
(A) find out all about it
(B) judge whether it is right or wrong
156. Are you oppressed by
(A) many different worries
(B) comparatively few
157. When you don't approve of the way a friend is acting, do you
(A) wait and see what happens
(B) do or say something about it

GO ON TO THE NEXT PAGE

158. Do you think it is a worse fault to be
(A) unsympathetic
(B) unreasonable
159. When a new situation comes up which conflicts with your plans,
do you try first
(A) to change your plans
(B) to change the situation
160. Do you think the people close to you know how you feel
(A) about most things
(B) only when you have had some special reason to tell them
161. When you have a serious choice to make, do you
(A) almost always come to a clear-cut decision
(B) sometimes find it so hard to decide that you do not wholeheartedly follow up either choice
162. On most matters, do you
(A) have a pretty definite opinion
(B) like to keep an open mind
163. As you get to know a person better, do you more often find
(A) that he lets you down or disappoints you in some way
(B) that, taken all in all, he improves upon acquaintance
164. When the truth would not be polite, are you more likely to tell
(A) a polite lie
(B) the impolite truth
165. In your scheme of living, do you prefer to be
(A) original
(B) conventional
166. Would you have liked to argue the meaning of
(A) a lot of these questions
(B) only a few

END OF TEST

PRINT NAME _____ (LAST) _____ (FIRST) _____ (MIDDLE)

SEX _____ TODAY'S DATE _____ BIRTHDATE _____

AGE _____ UNIT _____ (ORGANIZATION OR SCHOOL GIVING YOU THIS TEST)

OCCUPATION _____

IF NOW IN COLLEGE PUT CLASS (SR., JR., ETC.) AND MAJOR
IF NOT IN SCHOOL PUT GRADE AND COURSE (ACADEMIC, BUSINESS, ETC.)

1 A B 25 A B 49 A B
2 A B 26 A B 50 A B
3 A B 27 A B 51 A B
4 A B 28 A B 52 A B

Make your marks HEAVY and BLACK.

5 A B 29 A B 53 A B
6 A B 30 A B 54 A B
7 A B 31 A B 55 A B
8 A B 32 A B 56 A B
9 A B 33 A B 57 A B
10 A B 34 A B 58 A B
11 A B 35 A B 59 A B
12 A B 36 A B 60 A B
13 A B 37 A B 61 A B
14 A B 38 A B 62 A B

Erase stray marks completely.

15 A B 39 A B 63 A B
16 A B 40 A B 64 A B
17 A B 41 A B 65 A B
18 A B 42 A B 66 A B
19 A B 43 A B 67 A B
20 A B 44 A B 68 A B
21 A B 45 A B 69 A B
22 A B 46 A B 70 A B
23 A B 47 A B 71 A B
24 A B 48 A B

E I
S N
T F
J P

MAX 30 10 0 10 30 MAX

C I N
S N
T F
J P

TYPE TOTAL

A
B
C
D

Myers-Briggs Type Indicator-Form F

72 A B 85 A B 98 A B 111 A B 124 A B 148 A B
73 A B 86 A B 99 A B 112 A B 125 A B 149 A B
74 A B 87 A B 100 A B 113 A B 126 A B 150 A B
75 A B 88 A B 101 A B 114 A B 127 A B 151 A B
76 A B 89 A B 102 A B 115 A B 128 A B 152 A B
77 A B 90 A B 103 A B 116 A B 129 A B 153 A B
78 A B 91 A B 104 A B 117 A B 130 A B 154 A B
79 A B 92 A B 105 A B 118 A B 131 A B 155 A B
80 A B 93 A B 106 A B 119 A B 132 A B 156 A B
81 A B 94 A B 107 A B 120 A B 133 A B 157 A B
82 A B 95 A B 108 A B 121 A B 134 A B 158 A B
83 A B 96 A B 109 A B 122 A B 135 A B 159 A B
84 A B 97 A B 110 A B 123 A B 136 A B 160 A B
85 A B 98 A B 101 A B 114 A B 137 A B 161 A B
86 A B 99 A B 102 A B 115 A B 138 A B 162 A B
87 A B 100 A B 103 A B 116 A B 139 A B 163 A B
88 A B 101 A B 104 A B 117 A B 140 A B 164 A B
89 A B 102 A B 105 A B 118 A B 141 A B 165 A B
90 A B 103 A B 106 A B 119 A B 142 A B
91 A B 104 A B 107 A B 120 A B 143 A B
92 A B 105 A B 108 A B 121 A B 144 A B
93 A B 106 A B 109 A B 122 A B 145 A B
94 A B 107 A B 110 A B 123 A B 146 A B
95 A B 108 A B 124 A B 147 A B

BIOGRAPHICAL DATA

1. Code Name _____
2. Sex: M ☐ male
F ☐ female
3. Marital Status: M ☐ married
S ☐ single
4. Date of Birth: ☐ Month
☐ Day
☐ Year
5. Religion: ☐ Catholic
☐ Protestant
☐ Jewish
☐ Other, please specify _____
6. Citizenship: ☐ Citizen
☐ Immigrant
☐ Other, please specify _____
7. Teaching level: Please indicate at which level you've done the majority of your teaching.
☐ Primary (K-3)
☐ Intermediate (4-6)
☐ Junior High (7-8)
☐ Secondary (9-12)
☐ Other, specify _____
8. Years of teaching experience: Please state the total number of full years of contractual teaching, regardless of interruptions or leaves of absence.

2.

9. Educational Background: Please check the highest education level you've completed.

- ☐ Bachelor's degree
- ☐ Bachelor's degree plus some post graduate credits
- ☐ Master's degree or equivalent
- ☐ Master's degree plus some post-master's credits
- ☐ Doctor's degree or equivalent
- ☐ Doctor's degree plus some post doctoral work

10. Institution Type: Where did you do the majority of work for your Bachelor's degree?

- ☐ Private non-denominational university (Northwestern, I.I.T.)
- ☐ Private religious university (Loyola, De Paul)
- ☐ State University (U. of I., Northern)
- ☐ Private non-denominational college (Lake Forest, etc.)
- ☐ Private religious college (Mundelien, Knox, Concordia)
- ☐ State college
- ☐ Teachers college (Northeastern)
- ☐ Other, specify _____

11. Nationality: What is your national heritage on your natural father's side? _____

What is your national heritage on your natural mother's side? _____

Were your natural father and your natural mother born in the United States?
Please check one code in each column:

	Father	Mother
Yes	<input type="checkbox"/>	<input type="checkbox"/>
No	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	<input type="checkbox"/>	<input type="checkbox"/>

3.

12. Guardians: For the most part, by whom were you raised up to the age of 15?

- ☐ Both parents
- ☐ Mother alone
- ☐ Father alone
- ☐ Step parent(s)
- ☐ Foster parents
- ☐ Grandparents
- ☐ Other relatives
- ☐ Other arrangement, specify _____

13. Geographic Area: In what region of the country did you live most of the time when you were growing up?

- ☐ New England (Maine, N.H., Mass., Conn., R.I., Vermont)
- ☐ Middle Atlantic (N.Y., N.J., Penn.)
- ☐ East North Central (Ohio, Ind., Ill., Mich., Wisc.)
- ☐ West North Central (Minn., Iowa, Mo., N.Dak., S.Dak., Nebras., Kan.)
- ☐ Mountain (Montana, Idaho, Wyo., Colo., N.Mex., Ariz., Utah, Nev.)
- ☐ Pacific (Wash., Oregon, Calif., Alaska, Hawaii)
- ☐ South Atlantic (Delaware, Maryland, D.C., Virg., W.Virg., S. Carol., N. Carol., Georgia, Florida)
- ☐ East South Central (Kentucky, Tenn., Alabama, Miss.)
- ☐ West South Central (Arkansas, Louisiana, Oklahoma, Texas)
- ☐ Didn't grow up in U.S., Please specify _____

14. Community Size: For the most part, how would you categorize the area where you were raised up to the age of 15?

- ☐ very large city (1 million and over)
- ☐ large city (250,000 to 1 million)
- ☐ middle-sized city (50,000 to 240,000)
- ☐ small city (2,500 to 50,000)
- ☐ rural non farm

4.

14. Community Size: (cont.)

- ☐ rural
- ☐ suburb of a large city
- ☐ Other, specify _____

15. Parental Education Levels: What was the highest grade in school completed by your father and your mother? Please check one in each column.

	Father	Mother
no schooling		
8th grade or less		
some high school		
high school graduate		
some college		
college degree		
Master's degree or equivalent		
Doctor's degree or equivalent		
don't know		

16. Parental Occupations: Please check the category that best describes your parents' (guardians') occupation for most of their life. Please check one in each column.

	Father (Guardian)	Mother
professional (doctor, lawyer)		
managerial & proprietors		
craftsman (plumber, carp., etc.) & foremen		
semiskilled operative		
clerical, sales		
unskilled worker		
farmer		
doesn't apply		
other (specify)		

17. Parental Annual Income: Please check the income level that best describes your parents/guardians average income for most of their lives. Please check one in each column.

	Father	Mother		Father	Mother
Doesn't apply			\$6,000-7,999		
Less than \$500			\$8,000-9,999		
\$500-999			\$10,000-12,999		
\$1,000-1,999			\$13,000-15,999		
\$2,000-3,999			\$16,000 & over		
\$4,000-5,999					

THE TOTAL INVOLVEMENT INVENTORY

**Description and Scoring Key
Included for the Benefit of the Reader**

THE INVOLVEMENT INVENTORY

Richard Heslin and Brian Blake

Development. The Involvement Inventory is the outgrowth of the first author's curiosity about some differences between himself, his wife and his friends. The differences at first appeared to involve whether people approached life in an active or passive way. However, the differences became more complex when we looked carefully at the people and their orientations. Plato's three-fold view of people seemed to be relevant to the active-passive orientations. He described three kinds of men: philosophers, warriors, and the rest of us. His philosophers were concerned with intellect, his warriors with courage and will, and the rest with self-gratification. In current terminology these emphases are roughly analogous to cognition (ideas), motivation (getting things done), and emotions (feelings).

In order to measure these orientations, statements were written to indicate an active orientation regarding feelings and interpersonal involvement, *i.e.*, an open, expressive, extroverted manner. Statements were also written to measure an active orientation toward objects and the material world, *i.e.*, a task-accomplishing, project-completing set. Finally, statements were written that described a person who was very active in his approach to ideas and the pronouncements he hears from people, *i.e.*, statements indicating an analytic, questioning, examining set.

Thus the Involvement Inventory is based on a philosophy that there are three important phenomena in life with which a person must interact: (1) people, (2) objects, and (3) ideas. The person's comfort and ability to cope with the experiences he has with these phenomena affect whether he is able to reach out to them, grasp them and use them, or is tentative in his approach to them, or even avoids encountering them. These may be thought of as phenomenological arenas in which he may expend whatever amount of energy he chooses in meeting the challenges which present themselves within the arenas.

In summary, the Involvement Inventory measures three characteristics of people:

- (A) *Affective*, or feeling, involvement with people,
- (B) *Behaviorial* involvement in accomplishing tasks, and
- (C) *Cognitive* involvement with analyzing pronouncements encountered.

The ABC scales taken together represent a generally active involvement in and orientation toward life. A low scorer on the A scale tends to be affectively passive, emotionally controlled, and interpersonally cautious. A low scorer on the B scale tends to be a follower, finds it difficult to plan ahead, and finds doing projects distasteful. A person who scores low on the C scale tends to be accepting of information he receives, uninterested or unwilling to challenge information that comes to him, and willing to believe pronouncements of others.

The Involvement Inventory has been subjected to extensive testing and refinement. The present version of the instrument has been found to be reliable (A=.76, B=.78, C=.76,

total=.78) and valid (e.g., compared to low scorers, high A scale scorers prefer spending spare time with friends, high B scale scorers are involved in far more activities, and high C scale scorers are more likely to reject parental religious and political views). The correlation among the scales is A-B .37, A-C .18, B-C .49, or an average of .34. These correlations indicate moderate overlap in content.

SCORING

The response categories are weighted as follows: Disagree=1; Unsure, probably disagree=2; Unsure, probably agree=3; and agree=4. For statements that are reversed items, agreement indicates low involvement; the weighting is: Disagree=4; Unsure, probably disagree=3; Unsure, probably agree=2; and Agree=1. Statements that are reverse weighted appear in the latter portion of each scale. (A scale=statements 1-39, B scale=statements 40-74, C scale=75-102). The totals of the three scales can be added together for the overall involvement score.

Uses of the Instrument. The Involvement Inventory can be used to explore issues of life style. A person can get some insight into (1) how much energy he is expending beyond meeting the maintenance needs of his life and job, (2) whether that energy is focused in one of the three phenomenological arenas of life and (3) which one or two arenas are the focus of his energy and involvement.

The Involvement Inventory can be used to help a person generate a personal agenda for a workshop if he concludes that he is distributing his time and energy in a way that is not fruitful or if he feels that the way he copes with the three arenas is getting in his way at work or home. Participants in a workshop can be given this inventory on the first day. Scoring of their responses can be done by them or by clerical assistants. It is important that the participants get their scores relatively early so that they can use the information in the workshop. The facilitator may have the participants post their scores on the A, B, and C scales and on the total instrument using newsprint and felt-tipped markers. Make a group frequency distribution for each of the 4 scores using a chalkboard or newsprint. Have the members form into small groups (2-6 people) to interpret each other's score patterns and check out how the respondent sees his own scores. The instrument is also a useful device to teach the concepts of high and low involvement in each of the three arenas and in combinations of the three.

If the facilitator wishes to compare his group's scores with those of another group, the following norms are included as an example. The group illustrated was composed of 20 individuals functioning on some level as small group facilitators who were involved in a workshop in Montreal. Their backgrounds were fairly diverse and included industrial management, education, the clergy, and clinical psychology. Ages ranged from 25 to 55 years. The medians for this group were: A scale=116, B scale=100, and C scale=86. The median for the total equalled 300. For purposes of identifying significantly high or low scores, the middle fifty per cent ranged from 107 to 122 for the A scale, 88 to 109 for the B scale, and 78 to 92 for the C scale. The total ranged between 289 and 320.

THE INVOLVEMENT INVENTORY

Scoring

1. The A scale (affective or feeling involvement with people) includes items 1 through 39. Items 1 through 19 are weighed differently than items 20 through 39. Draw a line under item 19 on the scoring sheet. Add the checks in each column for items 1 through 19 and place the sum in the spaces below. Multiply each column total by the multiplier beneath it. Add the four products across and put the total in the blank designated (A).

x1	x2	x3	x4

_____ + _____ + _____ + _____ = _____ (A)

Draw a line under item 39. Add the checks in each column for items 20 through 39 and proceed as you did with items 1 through 19 (notice that the multipliers are reversed from those for items 1 through 19).

x4	x3	x2	x1

_____ + _____ + _____ + _____ = _____ (a)

2. The B scale (Behavioral involvement in accomplishing tasks) includes items 40 through 74. Draw a line under item 57. Proceed with the scoring as above.

x1	x2	x3	x4

_____ + _____ + _____ + _____ = _____ (B)

Draw a line under item 74 and proceed as above.

x4	x3	x2	x1

_____ + _____ + _____ + _____ = _____ (b)

3. The C scale (Cognitive involvement with analyzing pronouncements encountered) includes items 75 through 102. Draw a line under item 91 and proceed with the scoring as above.

x1	x2	x3	x4

_____ + _____ + _____ + _____ = _____ (C)

Total the remaining columns and proceed as above.

x4	x3	x2	x1

_____ + _____ + _____ + _____ = _____ (c)

4. Obtain scale scores by adding the totals for each two-part scale. Then, obtain the total involvement score by adding the three scale scores.

A + a = _____

B + b = _____

C + c = _____

Total involvement score = _____

APPENDIX G

DATA FOR RATER RELIABILITY

APPENDIX G

DATA FOR RATER RELIABILITY

Rater	Tape #	Literal	Reorganization	TOTAL LOW	Inference	Evaluation	Appreciation	TOTAL HIGH	TOTAL HIGH & LOW	RANK	TOTAL VALUES
C	1	5	3	8	2	1	1	4	12	3.5	0
	2	9	1	10	1	1	0	2	12	3.5	1
	3	8	3	11	3	1	2	6	17	8.5	1
	4	12	3	15	2	1	1	4	19	10	0
	5	9	2	11	2	2	1	5	16	6.5	1
	6	9	0	9	3	0	0	3	12	3.5	0
	7	9	5	14	1	0	2	3	17	8.5	0
	8	3	3	6	2	1	0	3	9	1	1
	9	10	3	13	3	0	0	3	16	6.5	0
	10	8	1	9	1	1	1	3	12	3.5	1
T	1	5	3	8	1	1	1	3	11	2	0
	2	9	1	10	2	0	0	2	12	3.5	0
	3	10	3	13	2	1	2	5	18	10	1
	4	13	2	15	2	0	0	2	17	8.5	0
	5	8	3	11	0	3	1	4	15	6	2
	6	9	1	10	2	0	1	3	13	5	0
	7	8	6	14	1	0	1	2	16	7	0
	8	3	3	6	2	1	0	3	9	1	0
	9	10	3	13	3	0	1	4	17	8.5	0
	10	10	0	10	0	1	1	2	12	3.5	1

APPENDIX G
DATA FOR RATER RELIABILITY

Rater	Tape #	Literal	Reorganization	TOTAL LOW	Inference	Evaluation	Appreciation	TOTAL HIGH	TOTAL HIGH & LOW	RANK	TOTAL VALUES
A	1	5	3	8	2	1	1	4	12	4	0
	2	10	0	10	1	1	0	2	12	4	0
	3	9	2	11	2	1	3	6	17	8	1
	4	12	3	15	2	0	1	3	18	10	0
	5	8	2	10	1	3	2	6	16	6	2
	6	9	0	9	2	1	0	3	12	4	0
	7	9	5	14	1	0	2	3	17	8	0
	8	4	3	7	2	1	0	3	10	1	1
	9	10	3	13	3	0	1	4	17	8	0
	10	8	1	9	0	0	2	2	11	2	1
B	1	6	3	9	2	0	1	3	12	4.5	0
	2	10	1	11	1	0	0	1	12	4.5	0
	3	10	2	12	1	1	2	4	16	7	1
	4	13	3	16	1	0	1	2	18	9.5	0
	5	8	2	10	2	2	1	5	15	6	1
	6	9	0	9	2	0	0	2	11	2.5	0
	7	10	5	15	1	0	2	3	18	9.5	0
	8	4	3	7	1	2	0	3	10	1	1
	9	11	13	14	2	0	1	3	17	8	0
	10	9	0	9	0	2	0	2	11	2.5	1

APPENDIX H

DATA COLLECTED FOR SAMPLE GROUPS

WORKSHOP APPROACH A - BIOGRAPHICAL DATA

Code Name	Age	Experience	Social Origin	Heslin Blake				Myers Briggs					
				Affective	Behavioral	Cognitive	TOTAL	Extravert Intravert	Sensing - Intuition	Thinking - Feeling	Judgment - Perception	TYPE	
Alabama	30	6	M	94	55	69	218	E 25	N 31	F 49	P 03	ENFP	
Michigan	59	20	M	90	79	63	232	I 25	S 47	F 43	J 31	ISFJ	
New Hamp.	24	4	M	120	92	99	311	E 45	N 23	T 17	J 19	ENTJ	
Texas	31	7	M	84	94	77	255	I 21	S 41	F 11	J 11	ISFJ	
Wyoming	56	17	LM	74	85	61	220	I 29	N 07	F 43	P 15	INFP	
Mass.	41	10	UM	89	95	81	265	E 11	S 05	T 15	J 27	ESTJ	
Arkansas	30	7	LM	114	95	80	289	E 19	S 31	T 09	J 29	ESTJ	
Louisiana	49	20	UM	98	99	95	292	E 11	N 27	T 21	J 01	ENTJ	
Missouri	32	8	LM	104	99	73	276	E 23	S 31	T 29	P 11	ESTP	
Rhode Id.	54	26	LM	103	58	59	220	E 17	S 17	F 49	J 11	ESFJ	

WORKSHOP APPROACH B - BIOGRAPHICAL DATA

Code Name	Age	Experience	Social Origin	Heslin Blake				Myers Briggs				
				Affective	Behavioral	Cognitive	TOTAL	Extravert Intravert	Sensing - Intuition	Thinking - Feeling	Judgment - Perception	TYPE
Florida	51	30	LM	75	106	104	285	E 17	N 27	F 31	P 31	ENFP
Utah	26	3	LM	91	92	81	264	E 23	N 23	T 11	J 21	ENTJ
Nevada	25	2	LM	89	84	77	250	E 15	N 17	F 17	J 27	ENFJ
Ohio	63	38	M	104	57	56	217	E 07	S 59	T 09	J 33	ESTJ
Tennessee	33	10	M	118	91	64	273	I 05	S 39	T 33	J 37	ISTJ
Arizona	26	3	M	108	84	71	263	E 37	N 37	F 45	P 51	ENFP
New Mexico	26	4	M	105	93	80	278	E 47	N 31	F 05	J 11	ENFJ
Vermont	30	8	M	117	88	75	280	I 27	N 07	F 03	P 33	INFP
Wisconsin	37	8	UL	98	104	81	283	I 09	S 23	F 21	J 53	ISFJ
Nebraska	40	14	M	110	83	92	285	E 11	N 35	F 03	P 27	ENFP

WORKSHOP APPROACH C - BIOGRAPHICAL DATA

Code Name	Age	Experience	Social Origin	Heslin Blake				Myers - Briggs				
				Affective	Behavioral	Cognitive	TOTAL	Extravert - Intravert	Sensing - Intuition	Thinking - Feeling	Judgment - Perception	TYPE
Idaho	28	6	LM	116	88	102	306	E 27	N 37	F 39	P 55	ENFP
Maine	36	13	LM	93	87	72	252	I 05	S 59	F 35	J 37	ISFJ
Montana	56	28	M	118	90	97	305	E 39	N 39	F 19	J 33	ENFJ
N. Carolina	28	6	N	110	111	83	304	E 37	N 45	T 09	O 03	ENTP
S. Carolina	42	16	LM	125	99	84	308	E 35	N 19	F 27	J 09	ENFJ
Puerto Rico	31	7	M	95	56	70	221	E 27	N 33	F 33	P 05	ENFP
Poland	46	25	M	70	101	99	270	E 13	N 22	F 25	P 25	ENFP
Yugoslavia	35	12	L	120	93	66	279	I 07	S 41	T 35	J 37	ISTJ
Germany	26	4	L	108	101	97	306	E 21	N 45	F 13	P 05	ENFP
Ireland	28	5	LM	89	90	79	258	I 19	N 23	T 11	P 11	INTP

WORKSHOP APPROACH A - QUESTIONS

Code Name	Low			High			Values			Total # Questions		
	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff
Alabama	29	35	+ 6	12	19	+ 7	1	2	+ 1	42	56	+ 14
Michigan	37	37	0	16	22	+ 6	3	4	+ 1	56	63	7
New Hampshire	43	20	-23	8	14	+ 6	3	2	- 1	54	36	- 18
Texas	37	33	- 4	0	2	+ 2	0	4	+ 4	37	39	+ 2
Wyoming	4	7	+ 3	19	15	- 4	0	0	0	23	22	- 1
Massachusetts	38	6	-22	16	24	+ 8	2	2	0	56	32	- 24
Arkansas	75	67	- 8	9	7	- 2	0	0	0	84	74	- 10
Louisiana	38	28	-10	0	3	+ 3	1	3	+ 2	39	34	- 5
Missouri	8	8	0	12	14	+ 2	0	1	+ 1	20	23	+ 3
Rhode Island	89	51	-38	15	21	+ 6	2	2	0	106	74	- 32

WORKSHOP APPROACH B - QUESTIONS

Code Name	Low			High			Values			Total # Questions		
	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff
Florida	7	9	+ 2	6	13	+ 7	1	6	+ 5	14	25	+ 14
Utah	51	34	- 17	9	15	+ 6	0	0	0	60	49	- 11
Nevada	68	18	- 50	23	43	+20	3	7	+ 4	94	68	- 26
Ohio	24	9	- 13	9	16	+ 7	0	2	+ 2	33	27	- 6
Tennessee	39	25	- 14	5	8	+ 3	0	4	+ 4	44	37	- 7
Arizona	27	7	- 20	10	18	+ 8	1	1	0	38	26	- 12
New Mexico	47	21	- 26	16	21	+ 5	1	3	+ 2	64	45	- 19
Vermont	23	31	+ 8	15	12	- 3	0	3	+ 3	38	46	+ 8
Wisconsin	66	30	- 36	23	33	+10	0	2	+ 2	89	65	- 24
Nebraska	5	5	0	10	23	+13	1	4	+ 3	16	32	+ 16

WORKSHOP APPROACH C - QUESTIONS

Code Name	Low			High			Values			Total # Questions		
	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff	Pre	Post	Diff
Idaho	26	28	+ 2	29	31	+ 2	3	1	- 2	58	62	+ 4
Maine	58	35	- 23	4	6	+ 2	0	0	0	62	41	- 21
Montana	20	22	+ 2	19	18	- 1	1	0	- 1	40	40	0
S. Carolina	20	7	- 13	27	7	-20	3	4	+ 1	47	18	- 29
N. Carolina	32	14	- 18	38	20	-18	6	10	+ 4	76	44	- 32
Puerto Rico	31	47	+ 16	16	18	+ 2	1	0	- 1	48	65	+ 27
Poland	57	47	- 10	0	10	+10	0	1	+ 1	57	58	+ 1
Yugoslavia	75	62	- 13	18	22	+ 4	0	0	0	93	84	- 9
Germany	5	4	- 1	0	2	+ 2	0	0	0	5	6	+ 1
Ireland	40	23	- 17	10	14	+ 4	1	2	+ 1	51	39	- 12

APPROVAL SHEET

The dissertation submitted by Marianne Kulak King has been read and approved by the following Committee:

Dr. Barney M. Berlin, Chairman
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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Education

5/27/74
Date

Barney M. Berlin
Director's Signature